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Equity of Health Sector Revenue Generation and Allocation in Paraguay

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Mission

The Partnerships for Health Reform (PHR) Project seeks to improve people's health in low- and middle-income countries by supporting health sector reforms that ensure equitable access to efficient, sustainable, quality health care services. In partnership with local stakeholders, PHR promotes an integrated approach to health reform and builds capacity in the following key areas:

- *better informed and more participatory policy processes in health sector reform*;
- *more equitable and sustainable health financing systems*;
- *improved incentives within health systems to encourage agents to use and deliver efficient and quality health service*; *and*
- *enhanced organization and management of health care systems and institutions to support specific health sector reforms*.

PHR advances knowledge and methodologies to develop, implement, and monitor health reforms and their impact, and promotes the exchange of information on critical health reform issues.

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Abstract

This paper presents methods and results from the Partnership for Health Reform's (PHR) empirical work on equity carried out in six departments of Paraguay. Its findings, based on government supplied data on health spending and household survey information on health care spending and consumption, will contribute to a more in-depth PHR major applied research study on equity. The paper opens with an overview of the health sector in Paraguay, provides information on government health care financing in the country, describes the methodology and findings of the household survey, and presents results and policy conclusions. Paraguay has a mixed health system, where public, social security, and private agents participate in health care financing and delivery. Public sector financing accounts for one-half of total health spending. The data illustrate that neither public nor total (public and private) health care resources are evenly allocated among study sites. The analysis reveals that illness incidence, as measured by self-perception, is highest among the poorest, rural households, yet consumption of health services in lowest among this group. The paper concludes with recommendations for improvement of equity in the allocation of resources on the part of the government through higher investment in infrastructure, health personnel and social programs, such as housing and nutrition.

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Acronyms

GDP	Gross Domestic Product
GNP	Gross National Product
IADB	Inter-American Development Bank
IPS	*Instituto de Previsión Social*
MSPBS	*Ministerio de Salud Pública y Bienstar Social*
PHR	Partnerships for Health Reform
WHO	World Health Organization

1. Introduction

Equitable access to or use of at least a minimum set of personal health services frequently is a major stated objective of many countries' health policies.[1] Actions are taken or, in some cases, policy options are set aside, in pursuit of this objective.

The World Health Organization (WHO) (1996) recently published a booklet that seeks to put new emphasis on equity in health care. Among other things, it calls for research into equity promoting policies and cross-national exchanges and comparisons.

The Partnerships for Health Reform (PHR) Project has set out to study equity in health care delivery and financing in developing countries and to contribute to the nascent but growing body of empirical knowledge in this area. The concept paper for this study defines the goals and objectives of PHR's work in this area and proposes that research be carried out in several developing countries around the world.

Specific research questions that PHR wishes to address through its work include the following:

- What is the incidence, or distributional effect, of the combination of revenue generation methods used for personal health services (incidence of financing)?[2]
- What is the incidence of spending allocations for personal health services (incidence of delivery financing)?
- What is the distribution of health status that results from the incidences of revenue generation and delivery for personal health services?
- What do cross country comparisons of results tell us about policies taken or foregone in the pursuit of equity?
- How well do government's attempts to use policies to achieve equity objectives meet those objectives?

[1] Personal, as opposed to public or collective, health services are at issue here. Health services with good public characteristics, such as a safe water supply and epidemiological surveillance, are collectively consumed and almost always collectively financed through government general revenues. The equity of this financing is not in dispute. However, the equity of financing methods and allocations of resources for personal services, such as treatments for illness or injury and individual protection through preventive screenings or immunizations, is controversial. The equity of financing and allocations for personal health services is the target of the proposed research.

[2] This question addresses health service financing's impact on socioeconomic status groups.

This paper presents methods and results from the project's empirical work on equity carried out in Paraguay, using government-supplied data on health spending and household-level information from a recent survey on health care consumption and spending.

The paper is organized as follows: Section 2 presents an overview of the health sector in Guatemala. Section 3 provides basic information about government health care financing in the country. Section 4 describes the household survey that produced the data set used in the analysis of equity of this paper. Section 5 presents the results from the analysis of equity. Finally, Section 6 offers a brief summary and policy conclusions.

2. Health Sector Overview

2.1 Health and Demography

By mid-1994 Paraguay had a population of 4.9 million, with 53 percent living in urban areas, 47 percent in rural areas (Table 2.1). The population is young: 15 percent of Paraguayans are under 5 years of age and 40 percent are under 15. At the national level, over the period 1990-1995, the fertility rate was 4.5 children per woman, placing the country far above Latin America's average of 3.2 children per woman. There are clear differences between the rural and urban areas where, during the same time span, the fertility rate was 5.8 and 3.3, respectively. The maternal mortality rate remains relatively high; at 180 per 100,000 live births, it is one of the highest in Latin America. Teenage pregnancies are common, and the rate of abortions is high.

Table 2.1 Economic, Demographic, and Health Indicators for Paraguay and Selected Latin American Countries

Selected Indicators		Ecuador	El Salvador	Paraguay	Colombia	Costa Rica
Demographic Indicators						
Population in mid-1994 (millions)		11.2	5.6	**4.8**	36.3	3.3
Population growth rate (%)	1980-90	2.5	1.3	**3.1**	1.9	2.8
	1990-94	2.2	2.1	**2.8**	1.9	2.1
Fertility rate (children per woman)	1980	5.0	5.3	**4.8**	3.8	3.7
	1994	3.3	3.8	**4.5**	2.6	2.9
Health Indicators						
Life expectancy at birth (years)	1960	70	69	**70**	73	N.A.
	1993	69	67	**68**	70	77
Child mortality rate (per 1,000 live births)	1980	67	81	**50**	45	20
	1994	37	42	**34**	20	13
Years of life lost per 1,000 population	1990	21	28	**22**	11	N.A.
Prevalence of malnutrition (under 5) (%)	1989-95	45	22	**4**	10	2
Babies with low birth weight, (%)	1991	N.A.	N.A.	**5**	17	N.A.
Health Coverage Indicators						
Children immunized with 3rd dose of DPT (%)	1990-91	89	60	**79**	84	N.A.
Children immunized against measles		54	53	**74**	75	N.A.
Births attended by health staff (%)	1985	27	35	**22**	51	93
Medical Resources						
Doctors per 1,000 population	1988-92	1.04	0.64	**0.62**	0.87	N.A.
Nurse-to-Doctor ratio, 1988-92		0.3	1.5	**1.7**	0.6	N.A.
Hospital beds per 1,000 population	1985-90	1.7	1.5	**1.0**	1.5	N.A.
National Income and Health Expenditure						
Per capita GNP, 1994 US$		1.280	1.360	**1.580**	1.670	2.400
Per capita total health expenditure, 1990 US$		43	61	**37**	50	N.A.
Total health expenditure as a % of GNP, 1990 % of PIB		4.1	5.9	**2.8**	4.0	N.A.
Public health expenditure as a % of GNP, 1990		2.6	2.6	**1.2**	1.8	N.A.
Private health expenditure as a % of GNP, 1990		1.6	3.3	**1.6**	2.2	N.A.
Aid flows as a % of total health expenditure, 1990		7.0	3.9	**6.4**	1.6	N.A.

Source: Authors, with information from World Bank, 1993, 1995 and 1996.

There is evidence that the high maternal mortality is caused by easily preventable health problems, such as toxemia and complications due to forced abortions. Child mortality in 1994 was 42 per 1,000 live births, twice as high as in Panama and three times higher than in Chile. The main cause of death among the general population were transmissible diseases. When compared with other Latin American countries in its income class, however, Paraguay's two main health status indicators—child mortality and life expectancy—are within the observed range. So is the availability of doctors, nurses, and hospital beds. Yet as of 1990, total health expenditure in the country, US$ 37 per capita, was significantly below that of countries with similar per capita income.

2.2 Organization of Health Sector

Paraguay has a mixed health system, where public, social security and private agents participate in health care financing and delivery. The *Ministerio de Salud Pública y Bienestar Social* (MSPBS) and the *Instituto de Previsión Social* (IPS) finance health services with their own resources (see below) and with central-government funding, while delivering primary and higher-level care in their own facilities.

The public subsector includes the MSPBS, Military Health, Police Health (part of the Ministry of the Interior), the National University of Asunción (Clinical Hospital and Neuropsychiatric Hospital), municipalities, and the recently created departments. This subsector, financed exclusively with national funds, in theory is responsible for delivering clinical health services to low-income individuals, who, according to official definition and estimates, represent 73 percent of the nation's population. The MSPBS is also responsible for the financing and provision of public health goods in the entire country. The social security subsector, financed with employer and employee contributions, includes the IPS and other entities of smaller size, which provide medical coverage to approximately 17 percent of the population.

The private subsector includes, on the financing side, private health insurance firms covering about 10 percent of the population. There are no official, country-wide estimates of out-of-pocket health spending, although results from a recent study indicate that this private source of health financing accounts for a large share of health funds in Paraguay. The private health care delivery sector includes numerous clinics, health centers, and health professional offices, and plays an important and increasing role in the country. This is attributed partly to the growing private health insurance market and partly to an increasing preference for private care among all segments of Paraguayan society.

Health sector decentralization is a high priority on the agenda of the administration. The first stage (1989-1994) of the decentralization process was aimed at strengthening the so-called health regions, by redefining their organization, functions, and resources. A second stage of the process began in 1995 when the MSPBS defined a reform strategy that conferred the role of administrative agents to the recently created departmental governments, with the objective of jointly arriving at a national health action plan in coordination with the regional health authorities.

2.3 Health Care Spending and Financing[3]

2.3.1 Public Sector Finances

In 1995 total public health spending was estimated at US$ 180 million, or 2.5 percent of the gross domestic product (GDP). That year spending by the MSPBS was US$ 94 million, or about one-half of total health spending in Paraguay. The IPS was the second largest spending institution after the MSPBS, with US$ 68 million, followed by the University Hospital.

Table 2.2 Public Health Spending in Paraguay, 1992-96 (Thousands of 1995 US$)

	Year				
Public institution	**1992**	**1993**	**1994**	**1995**	**1996**
Central administration	N.A.	92,869	90,718	97,929	N.A.
Ministry of Health (MSPBS)	78,819	83,319	84,058	94,185	127,846
Armed Forces	N.A.	9,229	6,207	3,203	4,605
Police	N.A.	321	453	597	N.A.
Social Security Institute (IPS)	46,216	56,855	61,204	68,448	N.A.
University Hospital	N.A.	9,154	11,986	11,654	N.A.
Psychiatric Hospital	N.A.	1,635	2,040	2,306	N.A.
Departments	N.A.	N.A.	N.A.	566	972
Asunción	N.A.	N.A.	1,334	1,460	N.A.
Health Directorate	N.A.	N.A.	864	905	N.A.
Polyclinic	N.A.	N.A.	470	555	N.A.
Total	N.A.	160,514	167,282	182,363	N.A.

Source: Iunes 1995, p.11.

Total government spending and Ministry of Health spending experienced only modest fluctuations in the period 1993-96, with the latter fluctuating between 4.4 percent and 5.8 percent of the former (Table 2.3). In the same four-year interval, central treasury funds accounted for just under two-thirds of MSPBS funding, followed by royalties (mainly from the hydroelectric power plant of Itaipu).

Table 2.3 Total Government and MSPBS Expenditure, and MSPBS Financing Sources, 1993-96 (Thousands of 1995 US$)

				Sources of financing (%)				
Year	**Total public expenditure**	**MSPBS expenditure**	**MSPBS as % of total**	**Treasury**	**Special funds**	**Royalties**	**Own funds**	**Other**
1993	1,432,957	82,367	5.75%	66.62	8.08	22.18	3.11	0.00
1994	1,890,643	83,097	4.40%	60.92	7.22	21.04	4.55	6.27
1995	1,622,823	91,167	5.62%	56.53	7.27	9.83	5.48	20.90
1996	N.A.	N.A.	N.A.	62.53	4.69	14.18	6.04	12.56

Source: Iunes 1995, p.7 and Iunes 1996, p.14.

[3]This section draws from M.L. Escobar (1997), Iunes (1995, 1996), and Británet al. (1997).

Budget allocations and health region transfers are based on budgets presented by the corresponding *Dirección Regional de Salud*. The average per capita health expenditure in the regions varied from US$ 5.69 and US$ 9.82 between 1993 and 1996, thus with important regional differences. For example, in 1995 Central Department received a per capita transfer of only US$ 2.50, while Cordillera Department received US$ 10.40.

Until recently there were no official estimates of private health spending through out-of-pocket payments to health care providers. In 1995, total health expenditure, excluding out-of-pocket expenditure, was estimated at US$ 207 million, an amount equivalent to 2.9 percent of GDP, and to an average annual per capita expenditure of US$ 43. This health spending figure included US$ 180 million spent by the central and regional governments and US$ 27 million of individual payments to private health insurance companies and pre-paid plans.

A household survey carried out in 1996 by the MSPBS and the Inter-American Development Bank (IADB) in Asunción and five other departments offered first estimates of out-of-pocket health payments in these locations.[4] These are presented in Table 2.4.

Table 2.4 Monthly Household Spending and Out-of-Pocket Health Spending in Asunción and Six Other Departments, 1996 (US$ of 1996)

	Geographic strata			Quintile					
	Asunción/ Central	Other urban	Other rural	1	2	3	4	5	Total
(1) Monthly household spending on all goods and services	790.26	544.04	523.38	178.13	291.39	396.13	557.76	1,655.63	685.67
(2) Monthly household out-of-pocket health spending	48.03	34.96	44.73	33.67	26.87	41.62	61.95	74.30	49.03
(2) as % of (1)	6.1	6.4	8.5	18.9	9.2	10.5	11.1	4.5	7.2

Source: Bitrán et al., 1997.

In 1996 the average household's health spending in the study areas was US$ 49.03, or 7.2 percent of total monthly household spending. Health spending in Asunción was the highest, as expected, although it was the lowest as a percentage of total household spending; in rural areas, health spending represented 8.5 percent of the monthly household budget. In relation to total spending, health spending decreased with total household consumption. Not counting indirect payments for health contributed by households through taxes, the above suggests that health financing was regressive as measured by out-of-pocket health expenditure alone. Those in the poorest household spending quintile spent 18.9 percent of their household budget on health, while those in the higher quintile devoted only 4.5 percent to medical care. Whether total health spending, including indirect and direct payment, is progressive or not in these departments depends on the incidence of taxation, an issue that is discussed below in the paper.

As noted, health spending, as described above, includes only direct, out-of-pocket payments to providers, and excludes indirect payment in the form of insurance premium or prepayment. Thus, the above figures correspond to only a part of private health spending in the study sites. However, since private health insurance is still uncommon in Paraguay, omitting premiums and prepayments should not

[4] The capital city of Asunción and the five other departments where the survey took place accounted in 1992 for a population of 2,392,651, or 50 percent of the country's population. The household- and individual-level results presented in Chapter 3 come from this survey as well.

significantly underestimate private health spending. Considering that annual household health spending was US$ 588.36 (US$ 49.03 x 12), that the average household size was 4.83 individuals, and that the total population in the study area was 2.4 million people, then total health spending in 1996 for this population was US$ 292 million (588.36 x 2,400,000/4.83). Since study locations account for one-half of the country's population, and assuming that the omitted other half has equal total consumption and health spending, then in 1996 total out-of-pocket private health spending in Paraguay would have been US$ 584 million.[5] This, added to the above-mentioned private payments made to insurers of US$ 27 million, would bring total private health spending in Paraguay to US$ 611 million. This is considerably more than annual public health spending, which was estimated at US$ 180 million. Even with the bias introduced in this calculation by the straight extrapolation of private spending to the other, poorer half of the country, the above finding suggests that in Paraguay private medical spending largely exceeds public spending.

Ministry of Health facilities engage in cost recovery for curative care of children and adults, charging for the visit, medicines, exams, and procedures, both in ambulatory health centers and in hospitals. Cost recovery proceeds must be turned in to the Ministry of Finance on a daily basis. In 1996, government health facilities in Asunción and the five other survey departments reported about US$ 1 million in cost recovery revenue. This reported amount is significantly less than—about 10 percent of—what cost recovery seems to have been that year, according to the household survey of health care demand and expenditure referred to above (see Table 2.5). The major gap in these figures may be explained in large part by the disincentive to report public facilities' own revenue arising from the policy of expropriation exercised by the Ministry of Finance.[6]

Table 2.5 Cost Recovery Revenue in Public Facilities According to Household Survey Data, 1996 (Millions of 1996 US$)

Type of care	Cost Recovery Revenue in Public Facilities
Curative care for children under 5 years	1.2
Curative care for all other patients	7.4
Obstetric care	2.6
All other hospital care	0.3
Total	11.5

Source: Bitrán, et al., 1997.

2.3.2 Government Health Financing in Survey Sites

This section presents information on public funding of MSPBS facilities in Asunción and the five departments, as well as the spending structure of public facilities. As can be seen from Table 2.6, the allocation of public resources to Asunción and the departments seems to offset poverty to some extent. The three poorest departments—Cordillera, Guairá, and Paraguarí—received the highest per capita allocation. Cordillera, for example, which features an average household consumption of about one-half that of Asunción, received a public allocation of funds that is twice as high as that of Asunción.

[5]This is likely to be an incorrect assumption: the locations excluded from the study are presumed to be poorer than the ones included.
[6]Escobar, 1997, pages 7 and 8.

Table 2.6 Sources of Health Care Financing in Survey Sites, 1996 (1996 US$)

Department	Treasury	Royalties Itaipu	Own Funds	Other	Total US$	Total US$ per Capita	Household per Capita Spending (Asunción = 1.00)
Asunción	2,101,000	122,345	118,784	46,699	2,388,828	4.42	1.00
Caaguazú	1,358,477	125,989	59,564	46,699	1,590,730	4.12	0.78
Central	1,654,295	75,326	294,330	46,699	2,070,649	2.39	0.78
Cordillera	1,283,951	169,552	95,793	46,699	1,595,996	8.03	0.47
Guairá	1,018,020	115,249	134,232	38,890	1,306,391	8.06	0.44
Paraguarí	1,155,666	41,694	41,106	50,711	1,289,132	6.18	0.42
Total	8,571,409	650,110	743,809	276,398	10,241,727	4.33	0.74

Treasury funds accounted for the bulk of public resources allocated to Asunción and the departments (Table 2.7). Own funds are the second most important source of revenue, although, as was pointed out in Section 1.3, it is likely that own funds reported by government health facilities largely understate actual cost recovery revenue.

Table 2.7 Structure of Health Care Financing in Survey Sites, 1996 (%)

Department	Treasury	Royalties Itaipu	Own Funds	Other	Total
Asunción	88.0%	5.1%	5.0%	2.0%	23%
Caaguazú	85.4%	7.9%	3.7%	2.9%	16%
Central	79.9%	3.6%	14.2%	2.3%	20%
Cordillera	80.4%	10.6%	6.0%	2.9%	16%
Guairá	77.9%	8.8%	10.3%	3.0%	13%
Paraguarí	89.6%	3.2%	3.2%	3.9%	13%
Total	83.7%	6.3%	7.3%	2.7%	100%

About 60 percent of the MSPBS budget was devoted to personnel for the combined six study sites, although in Asunción and Paraguarí it reached to 70 percent. Investment was the second largest source of outlays, followed by supplies.

Table 2.8 Composition and Structure of Health Expenditure in Survey Sites, 1996 (in 1996 US$ and %)

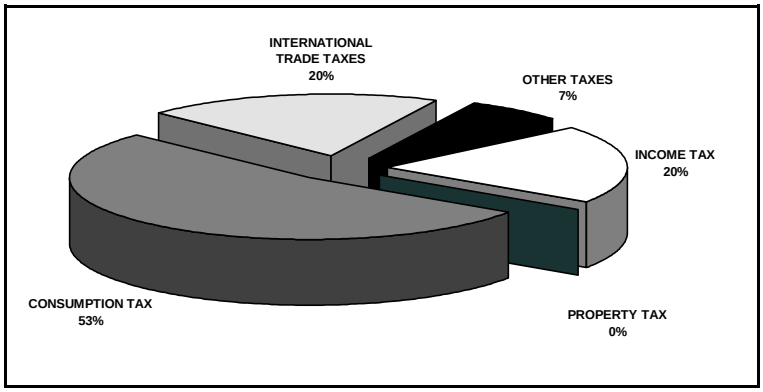
Department	Personnel		Non-Personnel		Supplies		Investment		Not Classified		Total	
	US$	%	US$	%	US$	%	US$	%	US$	%	US$	%
Asunción	1,744,456	73.0	64,827	2.7	254,056	10.6	320,283	13.4	5,206	0.2	2,388,828	23.3
Caaguazú	948,016	59.6	80,530	5.1	171,559	10.8	390,626	24.6	0	0.0	1,590,730	15.5
Central	1,214,244	58.6	104,053	5.0	338,011	16.3	414,341	20.0	0	0.0	2,070,649	20.2
Cordillera	991,807	62.1	58,453	3.7	250,442	15.7	295,294	18.5	0	0.0	1,595,996	15.6
Guairá	730,523	55.9	60,917	4.7	195,362	15.0	319,588	24.5	0	0.0	1,306,391	12.8
Paraguarí	878,299	68.1	36,538	2.8	183,798	14.3	190,496	14.8	0	0.0	1,289,132	12.6
Total	6,507,345	63.5	405,317	4.0	1,393,229	13.6	1,930,629	18.9	5,206	0.1	10,241,726	100.0

3. Government Finances

In 1995 public spending in Paraguay reached US$ 1,663 million which represented 23.4 percent of the GDP. Of this expenditure 93 percent was financed by the central government, while municipalities and departments respectively contributed the remaining 6.3 percent and 1.1 percent. Departments were created in 1994 and their expenditure increased from US$ 7 million in that year to US$ 18.4 million in 1995. The amount budgeted in 1996 for the departments was US$ 22.2 million. In 1995 the departments allocated an average of 3 percent of their total budget to health, an amount which they planned to increase to 4.4 percent in 1996.

As in other Latin American countries, Paraguay's public budget draws a rather modest amount of resource from direct taxes, while indirect taxes account for the bulk of it. For example, Value Added Tax (VAT, or tax on consumption) proceeds account for over twice as much as income taxes in the national budget (see Figure 3.1).

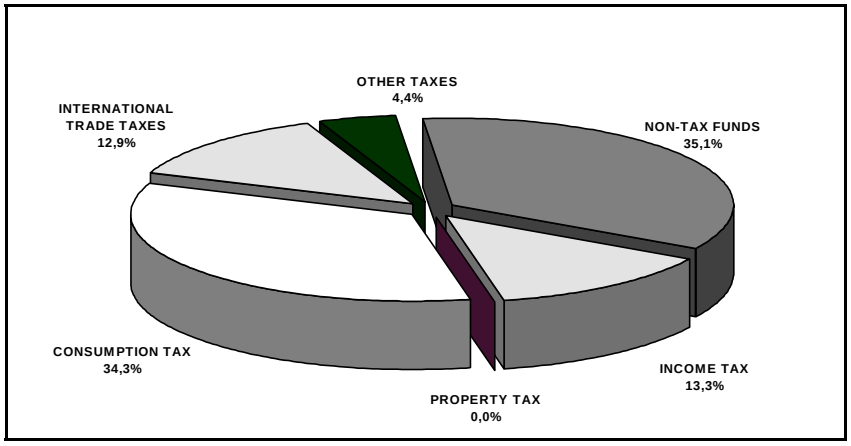
Figure 3.1 Structure of Central Government Tax Revenue, 1994



Source: Iunes 1995

Treasury funds come from tax and non-tax revenues. In 1994 tax revenues represented 64.9 percent of treasury resources, while the remaining 35.1 percent were non-tax revenues—primarily the royalties and compensations that Brazil pays through the Itaipu hydroelectric plant—accounting in 1995 for 20.6 percent of central government revenue (Figure 3.2).

Figure 3.2 Central Government Total Revenue Structure, 1994



Source: Iunes 1995.

4. Survey Methods

4.1 Description of the Survey

The analysis that follows is based on data from the 1996 household health care demand and expenditure survey carried out by the MSPBS and the Inter-American Development Bank in Asunción and five other departments of Paraguay as part of a health sector preparation loan. The survey was based on a probabilistic sample of 2,500 households in Asunción and the five other departments of Paraguay that together account for about one-half of the country's population.

4.2 Sample Design

A total of 11,750 individuals lived in the 2,500 households surveyed in Asunción and five other departments. The total population in these sites was 2,392,651 people in 1992, of which 60 percent lived in urban areas. The sample was broken down by geographic strata as follows: 1,000 households were from urban areas of the capital city of Asunción and the adjoining urban department of Central; 500 were from urban areas in the four other departments; and 1,000 households were from rural areas of the five departments.

Table 4.1 shows how the self-weighed sample of 2,500 households would provide insufficient information on the urban areas, excluding Asunción and Central, leading to the adoption of a probabilistic sample. Therefore, it justified the use of the analytical dominium as strata to fix the sample. Because the sample used could not have been self-weighed, it was necessary to calculate expansion weights based on the number of households in the population of each strata. The average household sizes used for this were: 4.07 for Asunción and Central and 4.47 for the remaining strata. The sample distribution and expansion weights are presented in Table 4.2.

Table 4.1 Self-Weighed Sample

Geographic Strata	Population 1992 (in Thousands)	Percentage	Self-Weighed Sample
Asunción and Central	1,367	57.13	1,428
Urban areas	233	9.75	244
Rural areas	792	33.11	828
Total	2,393	100.00	2,500

Table 4.2 Sample Fraction and Expansion Weights

Geographic Strata	Number of Households in the Population	Number of Households in the Final Sample	Sample Fraction	Expansion Weights
Asunción and Central	335,864	1,000	0.002977	335.86
Urban areas	52,208	500	0.009567	104.42
Rural areas	177,252	1,000	0.005642	177.25
Total	565,324	2,500	-	-

To study health care-seeking behavior by different population groups, the analysis that follows presents results according to the following strata:

- Area (urban or rural)
- Department
- Per capita household spending quintiles

4.3 Survey Instrument

The survey instrument contained seven sections: (1) household consumption in the last 7, 30, 180, and 365 days; (2) household member characteristics (age, sex, activity, education) and health problem perception (two recall periods were used: 30 days for children under 5 and 15 days for persons over 6[7]); (3) curative care demand for children under 5, emphasizing the incidence of diarrheal and upper-respiratory problems; (4) curative care for persons over 6 years of age; (5) preventive care for children under 5 (compliance with standard immunization programs); (6) use of hospital services in the preceding year by all respondents; and (7) maternal, child, and obstetric care in the last three years (see Table A.2).

4.4 Assessment of Socioeconomic Level

Total household consumption was measured for a variety of possible items of goods and services, over different recall periods based on typical frequency of purchase, using local prices. Consumption and spending information is presented in Guaranies, Paraguay's national currency, and in US$, at the observed exchange rate in 1996 of 1 US$ = 1,960 Gs.

4.5 Sample Characterization

The population of the survey was 490,621 households or 2,371,153 people. Average household size of the time of the survey was 6.04 persons. This figure varied by spending quintile, however in the lowest quintile average household size was eight persons, while in the richer households it was only 4.4.

[7] To make the comparison simple between children under 5 and population over 6, the data obtained for children under 5 was made equivalent with that of the population over 6 years of age by establishing a common recall period of two-week.

Average annual household consumption across all sites was US$ 8,245; it was 48 percent higher in urban areas (US$ 9,251) than rural settings (US$ 6,250). Annex B contains more detailed information on household member characteristics.

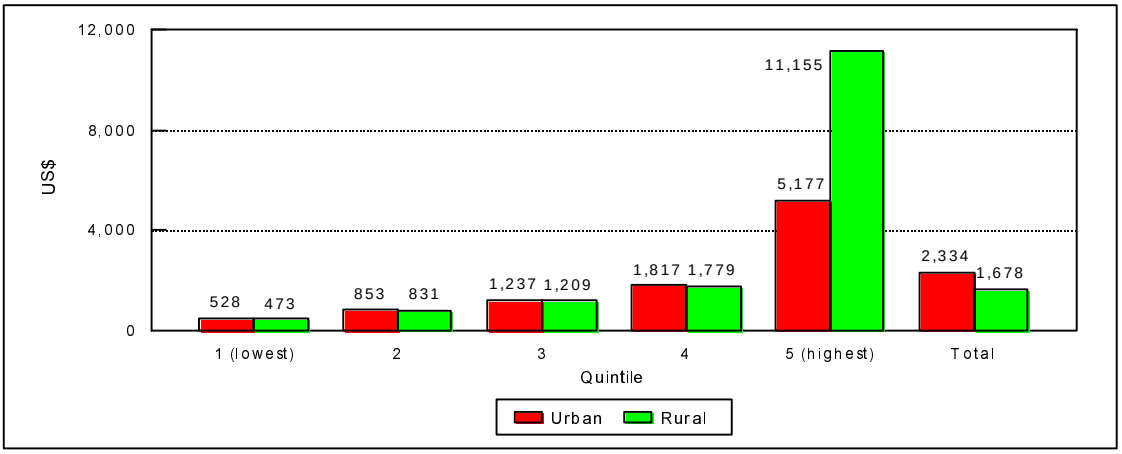
5. Survey Results

This chapter presents main survey results, as follows: household consumption, days inactive due to illness, health care-seeking behavior, choice of provider, utilization of hospital services, deliveries, consumption of medicines, and health spending. For more detailed information on each subsection, please see the annexes at the end of the paper.

5.1 Household Consumption

Average annual per capita consumption in rural areas in 1996 was US$ 1,678, or 72 percent of the equivalent amount in urban areas. Average per capita consumption for the overall population was US$ 2,085. The gross national product (GNP) per capita reported by the World Bank for Paraguay in 1995 was US$ 1,690, an amount that is 19 percent below what was obtained from the survey. GNP per capita and household spending need not coincide. A partial explanation for the difference is that the poorest departments of Paraguay were not included in the household survey. In the urban stratum, the poorest 20 percent of households had spending levels that were about one-fifth of those in the top income quintile. This spread was even greater among rural households (Figure 5.1).[8]

Figure 5.1 Average Annual per Capita Household Consumption, by Area and Quintile, 1996 (US$)

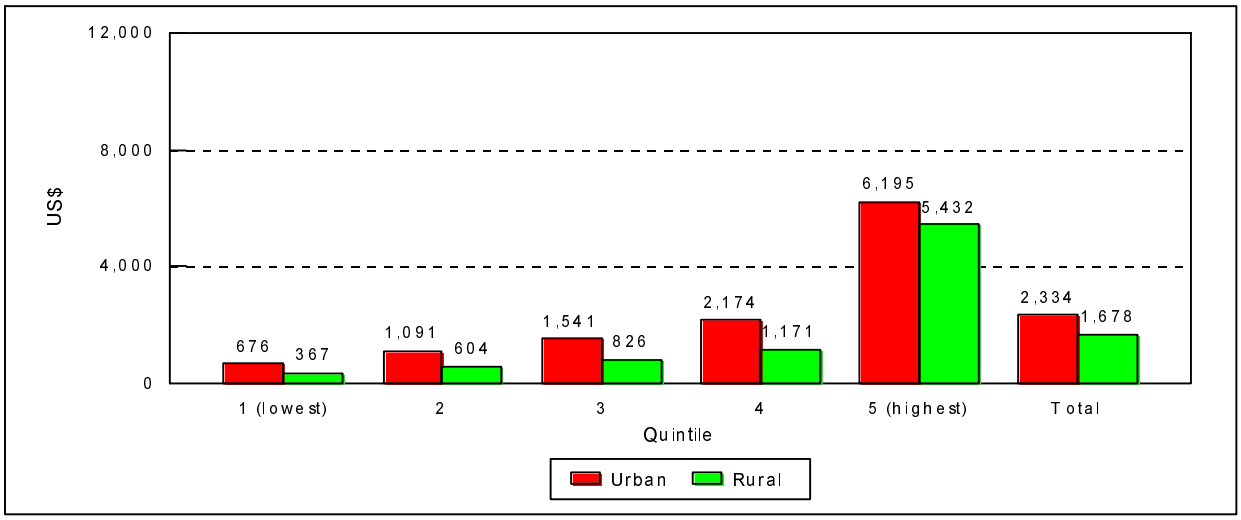


Three different per capita quintiles were built in this analysis. One used total population while the other two were based on total urban and total rural population. If the quintiles are built using total population, the number of people in each quintile will not be the same when separating people living in urban settings from those living in rural areas. Thus, if quintiles are built based on total population in each geographic strata different results may be observed. Figure 5.1 uses quintiles based on the total population, while Figure 5.2 presents results of quintiles constructed from the total population in each

[8] The high spending figure reported for Quintile 5 in the rural stratum may be attributable to one or several outlier households.

strata. In Figure 5.1 the average annual per capita consumption of the better-off in the urban areas was twice the amount consumed by those in the rural settings. However, in Figure 5.2, the richer population in the urban settings consume only 14 percent more than the richer population in the rural areas.

Figure 5.2 Average Annual per Capita Household Consumption, by Urban and Rural per Capita Quintile, 1996 (US$)



As Figure 5.3 shows, in urban areas the upper quintile accounted for over 60 percent of all consumption, whereas the bottom quintile represented a mere 2.07 percent of it, illustrating the marked skewness in the distribution of income in Paraguay (Annex C). Most of the consumption in rural areas also concentrated in the highest quintile, although the poorest population there consumed five times as much as its equivalent in the urban setting. Figure 5.4 presents the distribution of consumption using geographic area per capita quintiles. In this case, greater inequities exist in the rural settings.

Figure 5.3 Distribution of Annual Per Capita Consumption, by Area and Quintile (%)

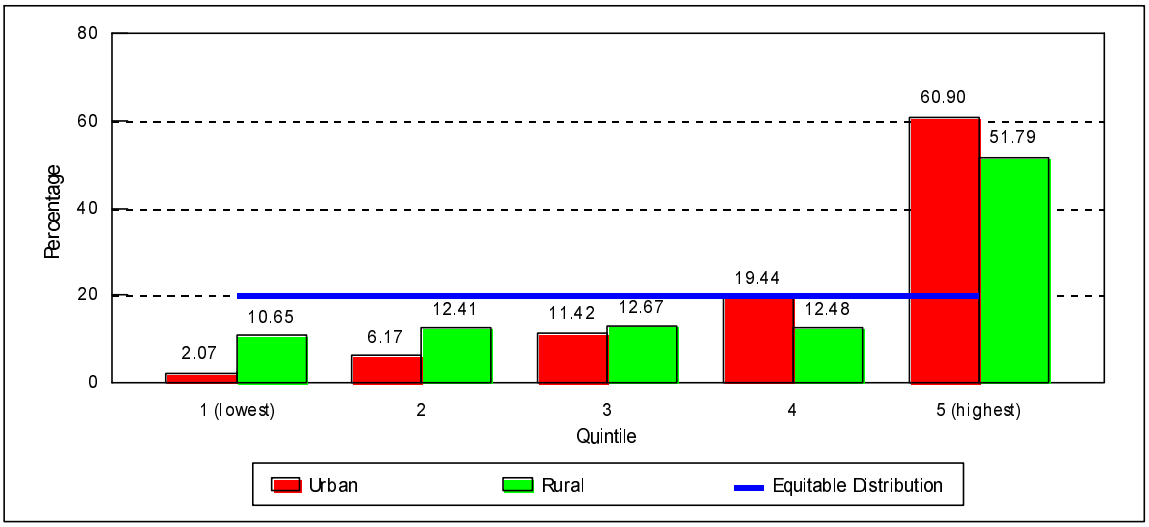
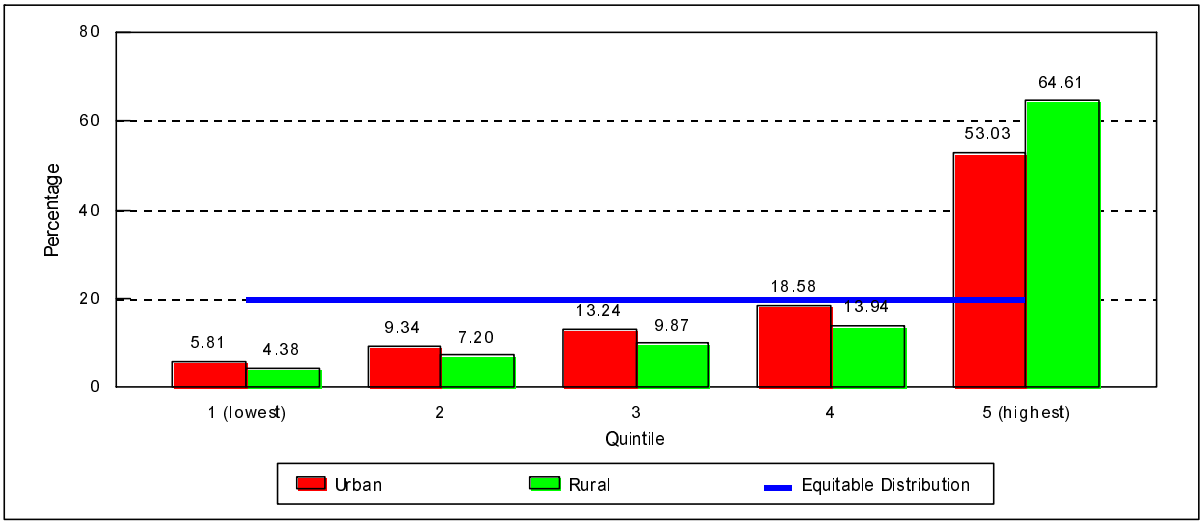


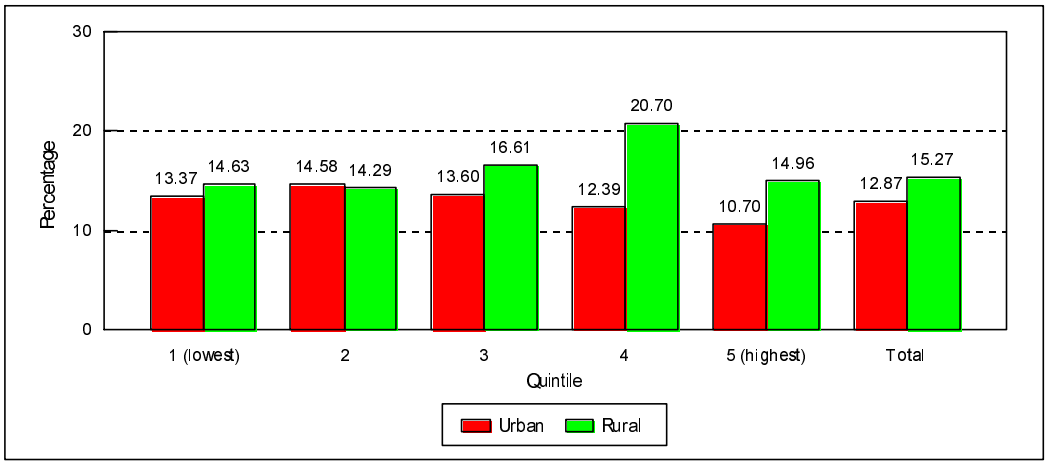
Figure 5.4 Distribution of Annual per Capita Consumption, by Area and Urban/Rural per Capita Quintile (%)



5.2 Health Problem Perception

There were important differences in illness reporting patterns between urban and rural areas and among quintiles within urban and rural locations (Figure 5.5). In rural locations, illness reporting showed no significant relation with income. In urban settings, illness reporting dropped with income. In the two poorest quintiles, health problem perception did not vary significantly. For the two top quintiles, rural inhabitants perceived health problems at a much higher rate than their urban counterparts. Epidemiological, as well as cultural differences related to the concept of well-being, may partly explain this behavior.

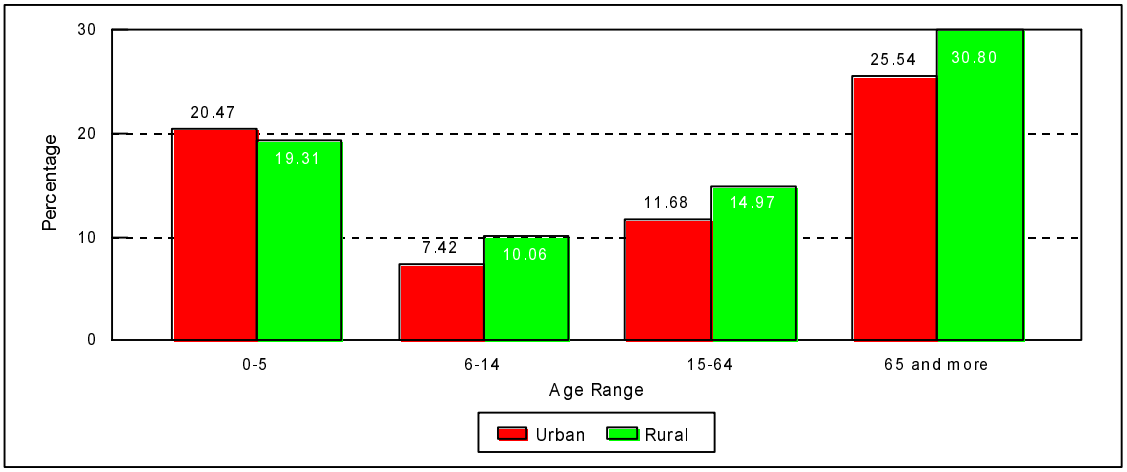
Figure 5.5 Health Problem Perception in the Past Two Weeks, by Area and Quintile (%)



Perception of health problem estimates over a two-week recall were used to extrapolate linearly the annual number of health events per person (Annex D).

In the case of children, the survey only inquired about the presence of diarrhea and upper respiratory infections. Health problem reporting among children under 5 was equal in the urban and rural areas: about 20 percent of children reported a problem on a two-week basis (Figure 5.6). In urban locations, among persons age 6 and older, health problem reporting increased with age and dropped with income (Annex D). That health problems are highest at extreme ages is a finding arising from all surveys of this kind, and reflects the greater susceptibility of the very young and the old to disease.

Figure 5.6 Health Problem Perception in the Past Two Weeks, by Area and Age Group (%)



5.3 Days Inactive Due to Illness

The average number of days inactive due to illness varied between urban and rural settings. In the latter, the average number of days inactive was between 4.53 to 7.76, while the urban population spent between 4.74 and 8.88 days. In the case the urban population, days spent inactive decreased with spending (Annex E), while in rural areas there was no relation with expenditure.

5.4 Health Care-Seeking Behavior

Overall, about one-half of those with a health problem sought some form of care, although this percentage was higher in urban areas. This difference may be partly explained by gaps in the availability of treatment options—likely to be greater in urban areas—and by lower income and education levels in rural areas. Within geographic strata, the proportion of people seeking care when ill generally increased with income, possibly reflecting the greater purchasing power and higher education levels of higher-income individuals.

Figure 5.7a Health Problem Perception and Health Care-Seeking Pattern in the Urban Area, by Quintile (%)

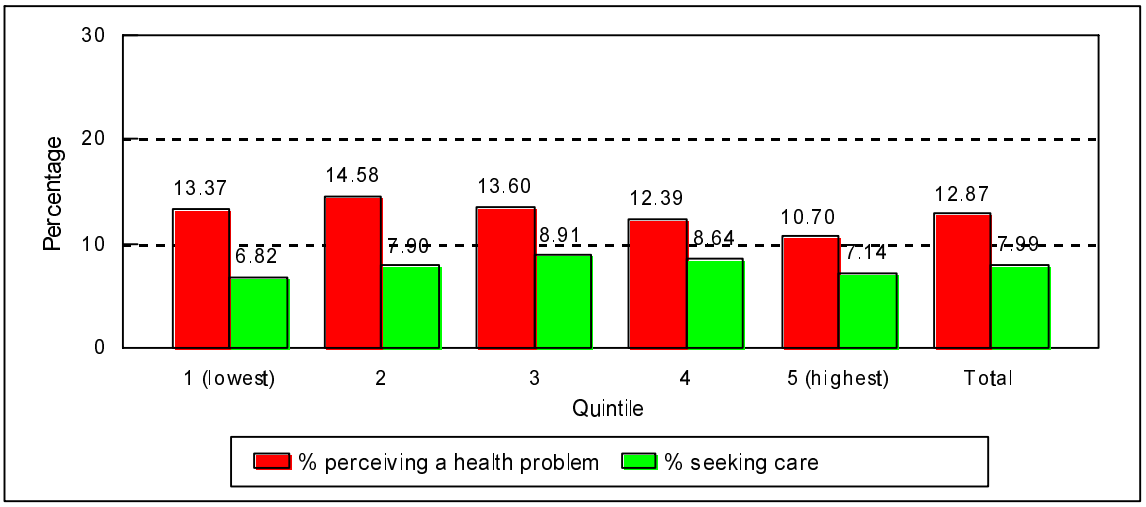
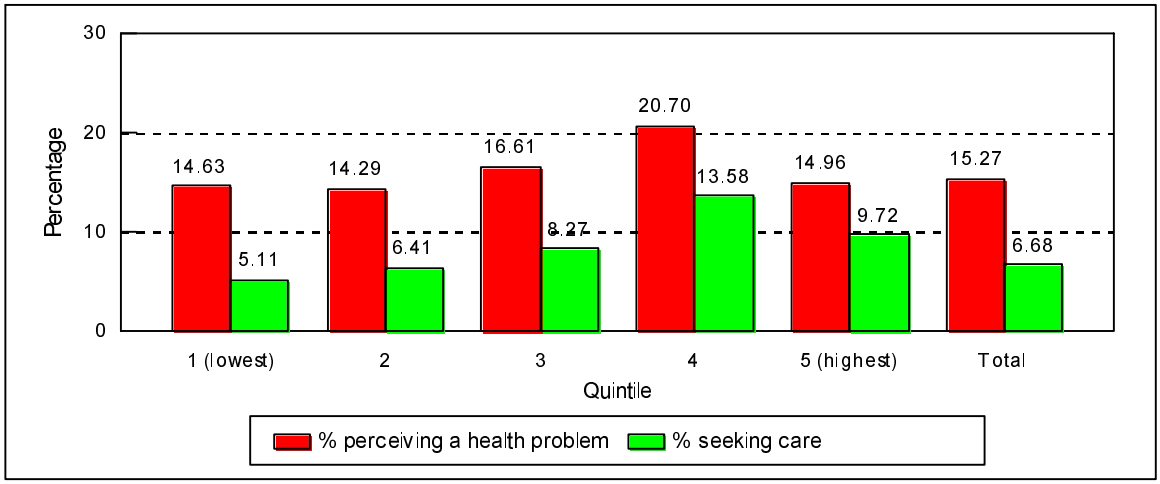


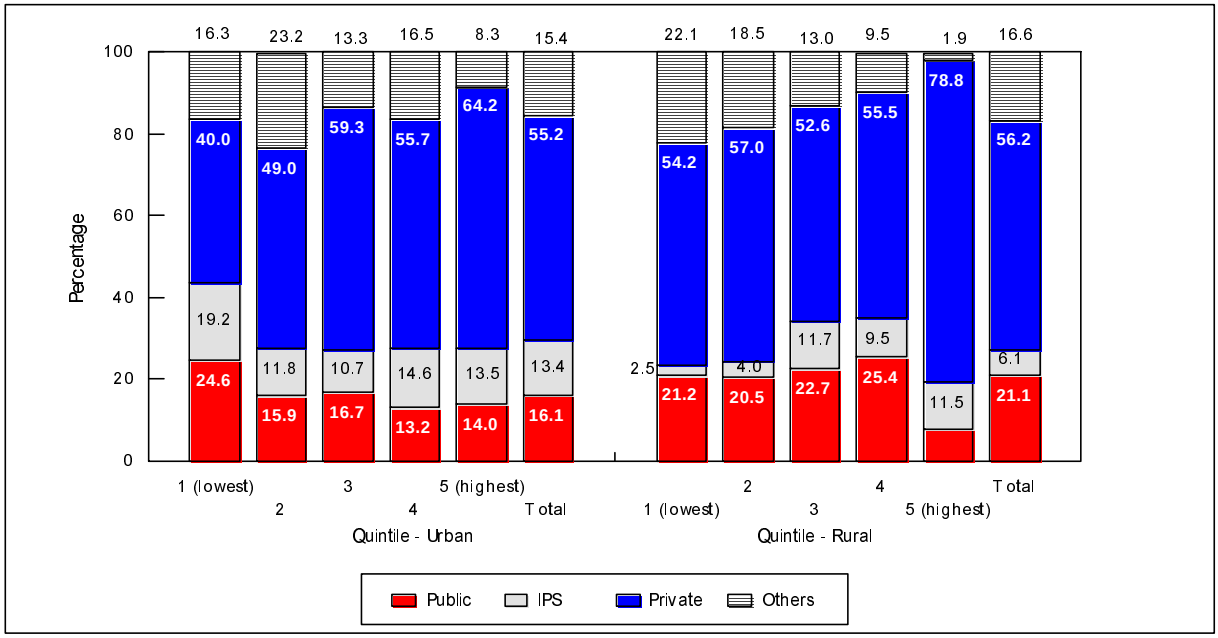
Figure 5.7b Health Problem Perception and Health Care-Seeking Pattern in the Rural Area, by Quintile (%)



5.5 Choice of Provider

Figure 5.8 shows the choice of provider among those who perceived a health problem and sought care in a health facility. There is a marked preference for private sources of care, a preference that increases with household spending. Most people in rural areas seek care from public providers. The preference for private care decreases among children under 5 in rural areas, a difference that can partly be explained by access as well as cultural gaps (Annex G).

Figure 5.8 Choice of Provider, by Area and Quintile

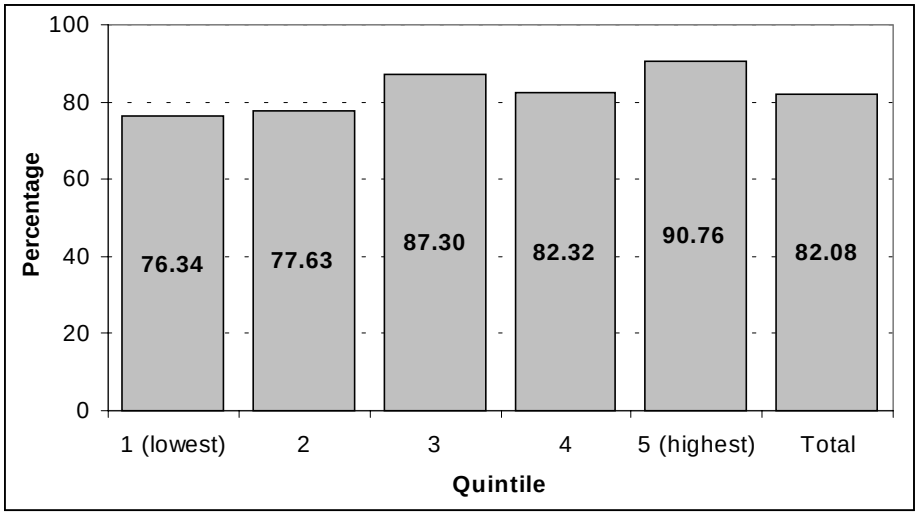


It is also important to note that a high percentage of those seeking care saw a doctor (Annex G). In addition, the frequency of being seen by a doctor increased with income and was higher in urban areas.

5.6 Utilization of Hospital Services

The use of hospital services increases with income (Figure 5.9). The percentage of those seeking care in a health facility is higher in urban settings (Annex H). There are small differences in the percentage of hospital care utilization across quintiles but never falls below 75 percent.

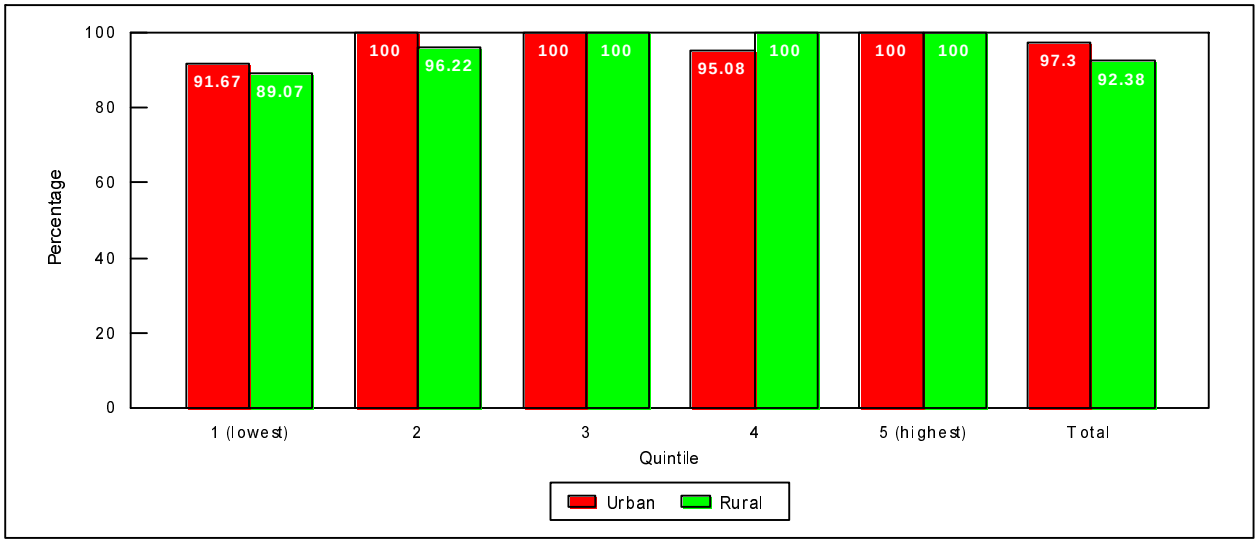
Figure 5.9 Percentage Seeking Care in a Health Facility, by Quintile



5.7 Prenatal Care and Immunizations

Figure 5.10 shows that almost all women in Paraguay area receive prenatal care. Use of these services is slightly lower in the case of women in the poorest families and in rural areas, although utilization of prenatal care never falls below 90 percent. Compliance with immunization programs increases with income. The rural settings exhibit lower rates of compliance than urban settings, a difference that can partly be explained by differences in education levels across households.

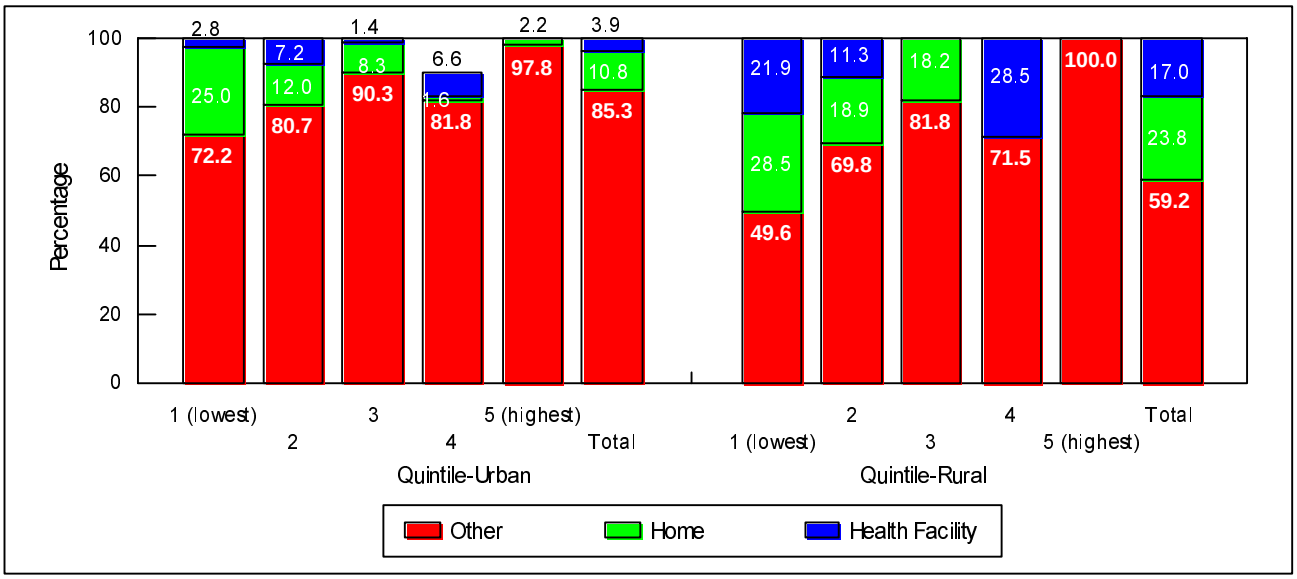
Figure 5.10 Percentage of Women Who Received Prenatal Care, by Area and Quintile



5.8 Deliveries

Overall use of hospital services for deliveries was high. It was higher in urban areas and increased with income (Annex J). Lower-income women prefer to deliver their babies at home with a midwife. Furthermore, the use of public providers decreases with income (Figure 5.11).

Figure 5.11 Choice of Provider for Deliveries, by Area and Quintile

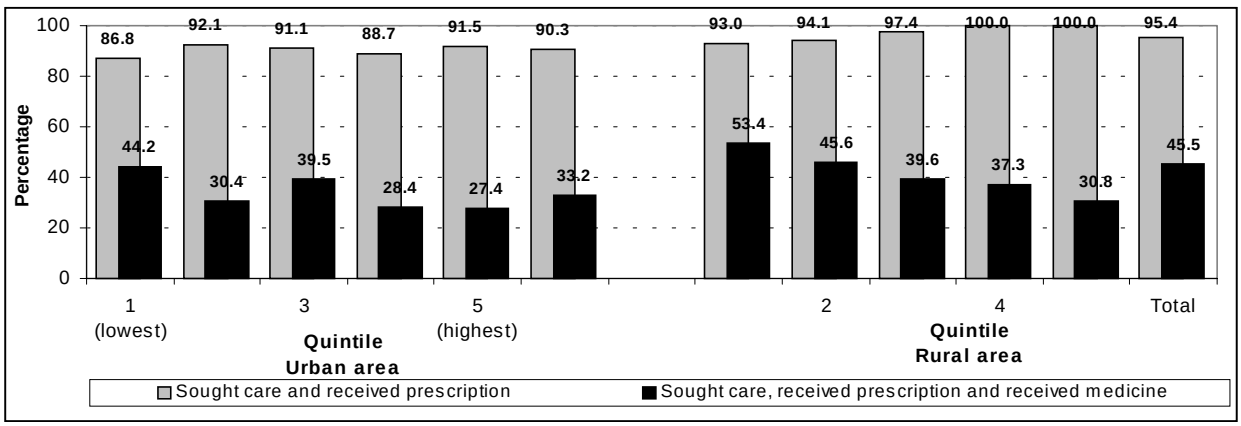


5.9 Consumption of Medicines

After a person seeks care and receives a prescription, the probability of being given those medicines at the facility where diagnosed decreases with income. In other words, it is more likely that lower-income families are given the medicines prescribed at the provider where they received care. A higher percentage of those who sought care in rural areas received a prescription compared to those who did the same in urban areas. Furthermore, facilities give prescribed medicines more often in rural areas than in urban areas.

The proportion of families buying medicines increased with income only in urban areas. Nevertheless, although most often the poorer families received medicines at the facility where diagnosed, a much higher percentage of them bought medicines because of the higher preference for self-medication in low-income families in rural areas (see Annex K).

Figure 5.12 Percentage Seeking Care Receiving a Prescription and Receiving Medicines at the Health Facility, by Area and Quintile (%)



5.10 Health Spending

Figure 5.13 shows the annual per capita consumption and health expenditure (as a percentage of per capita consumption). For financing to be considered equitable, the proportion of income allocated to health by each person must increase with his or her income (proportional). In Paraguay the financing of health care is inequitable, and even more so in urban areas. As income increases, the proportion of income being spent on health care decreases. The trend in rural settings seems to be more equitable, except for the richest families. Nevertheless, the absolute amount being spent on health care does increase with income (Figure 5.14).

Figure 5.13 Annual per Capita Consumption and Health Expenditure (as % of per Capita Consumption), by Area and Quintile

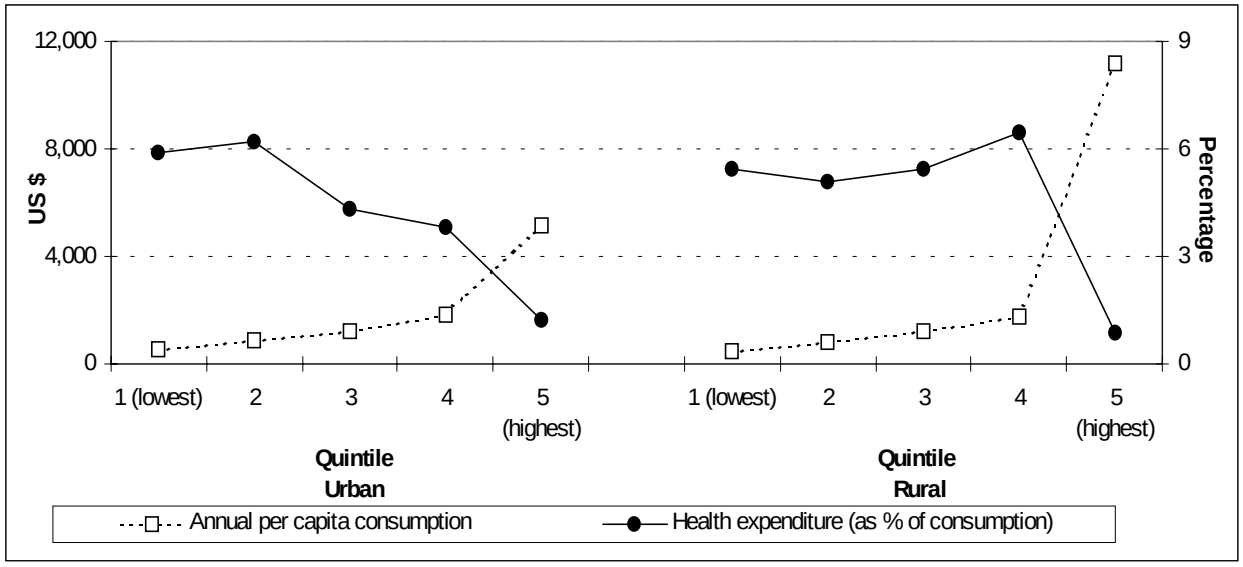


Figure 5.14 Health Expenditure, by Area and Quintile

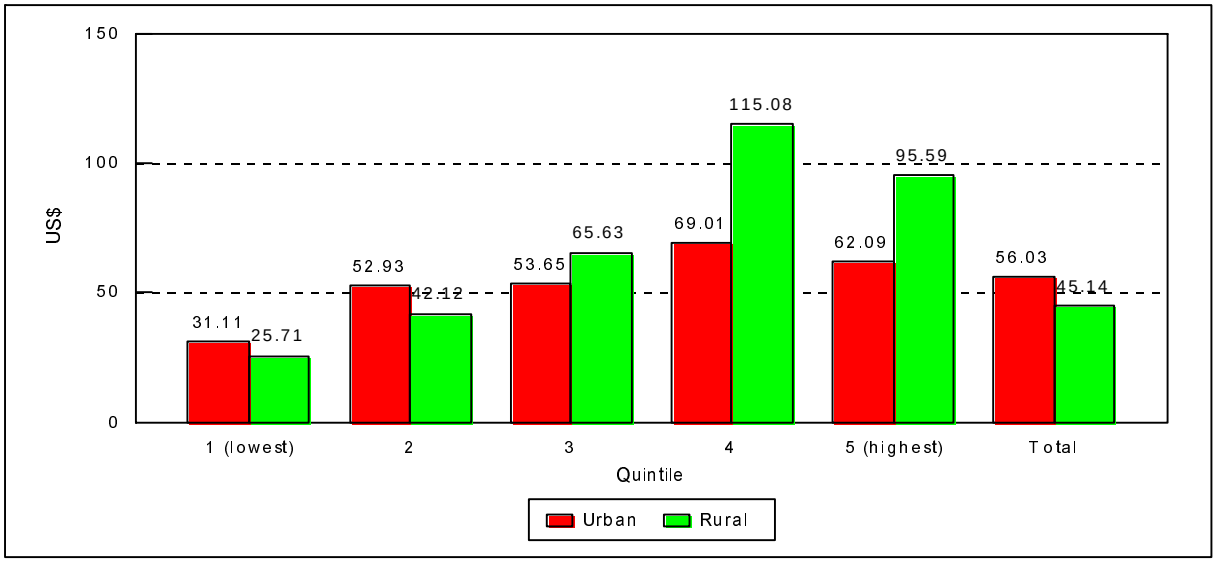


Figure 5.15a Per Capita Expenditure on Medicine in Urban Areas, by Quintile

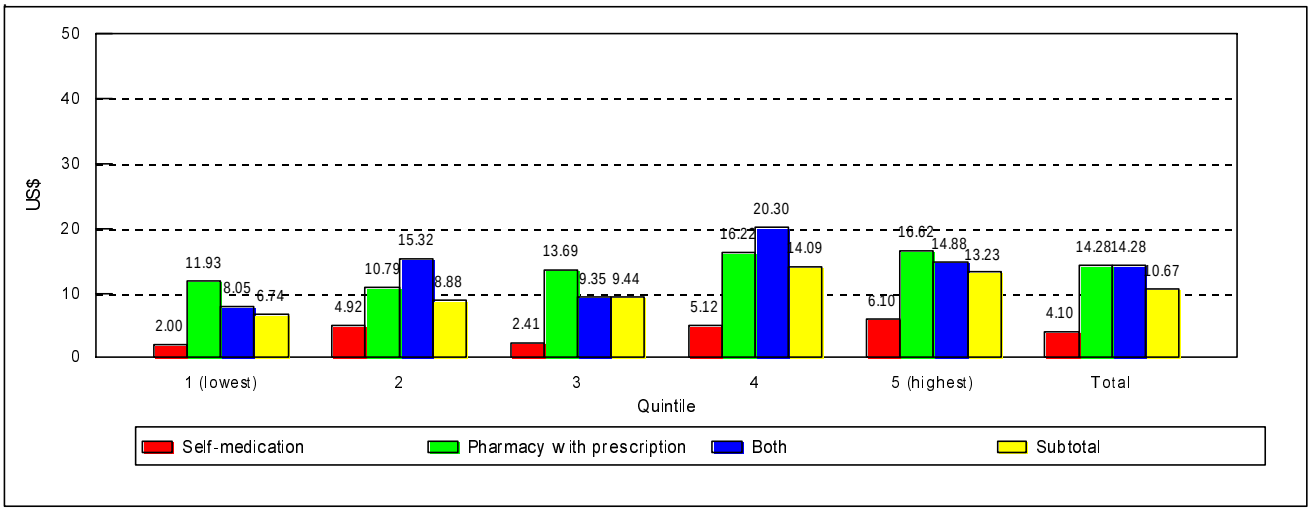
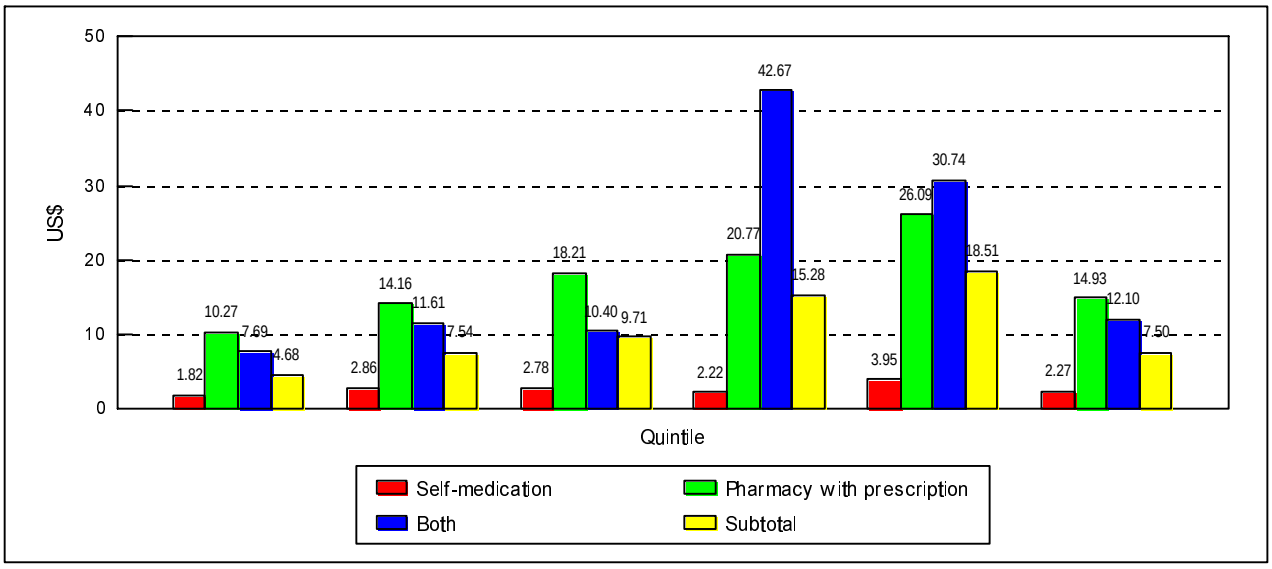


Figure 5.15b Per Capita Expenditure on Medicine in Rural Areas, by Quintile



6. Analysis and Conclusions

Health care consumption is determined both by demand and supply factors. The preceding chapter presented information about household overall consumption and consumption of health care services in Asunción and five other departments of Paraguay.

A main finding arising from the analysis is that illness incidence, as measured by self-perception, is highest among the poorest, rural households, yet consumption of health services is lowest among this group. Demand and supply factors may explain this pervasive finding.

On the demand side, the survey data showed that rural households exhibit much lower income (as measured by the proxy *household consumption*) levels than their rural counterparts, and that within geographic strata (urban and rural), poorer households account for a share of total income that is significantly below their number in the population. In other words, income in the study regions of Paraguay is highly skewed, with over one-half of it concentrated among the top 20 percent richest households.

Lower income and associated lower levels of education may to an important extent explain higher illness incidence and a lower propensity to consume health services among the poor, particularly in rural areas. But supply factors, such as the availability of health facilities, the quality of care, the accessibility to care, the prices of services, and the time costs of care, may all affect demand and therefore consumption of services.

Table 6.1 presents a brief summary of health problem incidence and health care consumption in study sites, organized by department and Asunción. The top part of the table shows self-perception of illness—generally decreasing with income—and selected utilization statistics for the most part decreasing with income. The bottom rows of the table show time costs of care for all health facilities. As can be seen, travel time to health facilities is significantly higher in the poorer departments. This variable may be partly responsible for lower demand and utilization in these locations.

How well is public investment allocated among departments to narrow gaps in access to health care, and therefore to improve equity in financing and delivery? Table 6.2 presents selected statistics of government health spending in Asunción and the five departments.

As can be seen, in 1995-96 Ministry of Health investment in physical plant (buildings and equipment) averaged US$ 11.20 per inhabitant in the four predominantly rural departments (i.e., all but Asunción and Central). Only Caaguazú showed a significant deficit of public health infrastructure (US$ 4.27 per capita, or a 38 percent deficit relative to the average). Likewise, the MSPBS spent on average US$ 0.29 on personnel per month in the four predominantly rural departments. Caaguazú again was well below this average.

Table 6.1 Demand for Health Services in Asunción and Five Other Departments of Paraguay, 1995 (%)

Indicators	Asuncion	Central	Asuncion and Central	Cordillera	Paraguari	Caaguazu	Guaira	Total	Total excluding Asuncion	Total excluding Asuncion and Central
DEMAND										
Perception of health problem										
Children under 5, last 30 days (%)	**39.6**	**42.4**	**41.6**	**46.0**	**38.4**	**37.7**	**49.2**	**41.5**	**41.9**	**41.5**
Persons 6 and older, last 15 days (%)	**10.0**	**11.0**	**10.6**	**17.1**	**19.2**	**12.0**	**14.3**	**12.5**	**13.1**	**15.0**
Hospitalización último año (%)	**4.8**	**3.3**	**3.8**	*3.6*	*3.5*	**4.7**	*3.9*	**3.9**	**3.7**	**4.1**
Curative visit										
Children under 5, last 30 days (%)	**85.1**	**71.3**	**75.1**	**46.3**	**46.9**	**45.4**	**50.3**	**61.7**	**58.4**	**46.7**
Persons 6 and older, last 15 days (%)	**70.4**	**58.9**	**62.8**	**45.9**	**42.9**	**45.0**	**42.3**	**53.4**	**51.2**	**44.3**
Self-medication										
Children under 5, last 30 days (%)	**24.3**	**38.0**	**34.2**	**52.8**	**77.3**	**64.7**	**59.5**	**47.9**	**51.7**	**64.1**
Persons 6 and older, last 15 days (%)	**42.3**	**44.6**	**43.8**	**55.0**	**60.1**	**51.4**	**55.9**	**49.7**	**50.0**	**54.8**
Selection of providers										
Children under 5, last 30 days (%)										
Ministry of Health	**12.7**	**20.6**	**17.6**	*18.1*	*34.9*	*45.2*	*30.4*	**25.7**	**28.1**	**34.8**
Private	**65.1**	**56.0**	**59.5**	*58.8*	*44.9*	*23.2*	*28.2*	**44.9**	**45.6**	**36.2**
IPS	*6.4*	*7.8*	*7.3*	*7.4*	*2.0*	*0.0*	*5.1*	*8.1*	*5.2*	*2.8*
Pharmacy	*4.8*	*5.7*	*5.4*	*5.4*	*8.1*	*25.3*	*18.2*	*8.1*	*11.2*	*16.2*
Traditional medicine	*0.0*	*2.8*	*1.7*	*2.0*	*10.1*	*6.3*	*18.2*	*11.8*	*5.7*	*8.3*
Home	*11.1*	*7.1*	*8.6*	*8.3*	*0.0*	*0.0*	*0.0*	*1.5*	*4.3*	*1.7*
Total	*100.1*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.1*	*100.1*	*100.0*	*100.0*
Persons 6 and older, last 15 days (%)										
Ministry of Health	*16.0*	*16.3*	*16.2*	*27.4*	*27.9*	*14.2*	*16.0*	**18.4**	**18.4**	**20.2**
Private	**40.0**	**43.6**	**42.2**	*38.9*	*37.7*	*40.2*	*34.8*	**40.6**	**40.9**	**38.5**
IPS	**29.0**	**28.5**	**28.7**	*16.8*	*15.2*	*18.3*	*15.5*	**23.6**	**22.4**	**16.8**
Traditional medicine	*5.0*	*5.5*	*5.3*	*16.0*	*19.2*	*24.3*	*29.2*	**12.1**	**14.3**	**22.3**
Home	*10.0*	*6.1*	*7.6*	*1.0*	*0.0*	*3.0*	*4.6*	*5.2*	*4.1*	*2.2*
Total	*100.0*	*100.0*	*100.0*	*100.1*	*100.0*	*100.0*	*100.1*	*99.9*	*100.0*	*100.0*
Travel time to health facility										
Children under 5, last 30 days (%)	**20**	**53**	**43**	**91**	**38**	**74**	**70**	**54**	**61.4**	**69.0**
Persons 6 and older, last 15 days (%)	**24**	**38**	**33**	**64**	*N.A.*	**85**	*N.A.*	*N.A.*	*N.A.*	*N.A.*
Waiting time in the facility										
Children under 5, last 30 days (%)	**52**	**39**	**43**	**36**	**89**	**28**	**29**	**42**	**41.2**	**43.1**
Persons 6 and older, last 15 days (%)	**65**	**62**	**63**	**60**	**34**	**36**	**76**	**57**	**54.3**	**47.3**

& Statistically significant figures in bold face; figures statistically not significant in italics.
N.A. Not available.

The table also presents data on the number of health facilities, both public and private, in relation to the population. As can be seen, Caaguazú had about one-half the number of facilities per capita (81 inhabitants per facility) than the other departments. Finally, Cordillera, Paraguarí, and Caaguazú had deficits in the total number of hospital beds, when compared to the average.

In sum, neither public nor total (public and private) health care resources were evenly allocated among study sites. This imbalance in health investment may be behind differences in demand and utilization.

Improving the equity in the allocation of resources for health requires further effort on the part of the government in Paraguay. But this effort should not only be limited to greater spending in infrastructure and facility-based health personnel, but should also include a higher investment in education and other social programs, such as housing and nutrition.

Table 6.2 Population and Health Care Supply Indicators in Asunción and Five Other Departments of Paraguay, 1995-96

Main Indicators	Asuncion	Central	Asuncion and Central	Cordillera	Paraguari	Caaguazu	Guaira	Total	Total excluding Asuncion	Total excluding Asuncion and Central
Population and area										
Urban population	540,710	690,021	1,230,731	61,462	44,454	105,847	47,300	1,489,794	949,084	259,063
Rural population	0	176,835	176,835	137,239	164,073	280,565	114,691	873,403	873,403	696,568
Total Population	540,710	866,856	1,407,566	198,701	208,527	386,412	161,991	2,363,197	1,822,487	955,631
Population under 5 years (%)#	12.0	12.1	12.1	13.7	11.9	14.9	14.3	12.8	13.0	13.9
Area (Km2)	117	2,454	2,571	4,854	3,123	12,969	3,945	27,462	27,345	24,891
Population density (inhabitants per Km2)	4,621	353	547	41	67	30	41	86	67	38
SUPPLY OF HEALTH CARE SERVICES										
Physical plant Ministry of Health (MSPBS)										
Physical plant (US$)	N.A.	3,242,041	N.A.	2,618,879	2,919,378	2,677,835	2,488,182	N.A.	13,942,026	10,704,274
Physical plant per capita (US$/person)	N.A.	3.74	N.A.	13.18	14.00	6.93	15.36	N.A.	7.65	11.20
Surplus (deficit) of investment with respect to average 1 (US$/pers)*	N.A.	(3.91)	N.A.	5.53	6.35	(0.72)	7.71	N.A.	0.00	-
Surplus (deficit) of investment with respect to average 1 (US$)*	N.A.	(3,389,407)	N.A.	1,098,817	1,324,146	(278,217)	1,248,951	N.A.	0.00	-
Surplus (deficit) of investment with respect to average 2 (US$/pers)*	N.A.	-	N.A.	1.98	2.80	(4.27)	4.16	N.A.	-	0.00
Surplus (deficit) of investment with respect to average 2 (US$)*	N.A.	-	N.A.	393,177	583,612	(1,650,467)	673,678	N.A.	-	0
Human resources capacity MSPBS										
Human resources (US$/month)	N.A.	208,045	N.A.	91,402	89,667	54,098	42,118	N.A.	485,330	277,284
Human resources per capita (US$/month/person)	N.A.	0.24	N.A.	0.46	0.43	0.14	0.26	N.A.	0.27	0.29
Surplus (deficit) of investment with respect to average 1 (US$/pers)*	N.A.	(0.03)	N.A.	0.19	0.16	(0.13)	(0.01)	N.A.	0.00	-
Surplus (deficit) of investment with respect to average 1 (US$)*	N.A.	(26,006)	N.A.	37,753	33,364	(50,234)	(1,620)	N.A.	0	-
Surplus (deficit) of investment with respect to average 2 (US$/pers)*	N.A.	-	N.A.	0.17	0.14	(0.15)	(0.03)	N.A.	-	0.00
Surplus (deficit) of investment with respect to average 2 (US$)*	N.A.	-	N.A.	33,748	29,161	(58,023)	(4,885)	N.A.	-	0
Number of public and private health care facilities										
Ministry of Health	33	47	80	36	40	63	36	335	222	175
Private providers	N.A.	19	N.A.	3	-	13	3	N.A.	38	19
Social Security	N.A.	3	N.A.	8	5	5	3	N.A.	24	21
Other	N.A.	1	N.A.	-	-	-	1	N.A.	2	1
Total	N.A.	70	N.A.	47	45	81	43	N.A.	286	216
Number of inhabitants per facility	N.A.	12,384	N.A.	4,228	4,634	4,771	3,767	N.A.	6,372	4,424
Number of facilities per 10,000 persons	N.A.	0.81	N.A.	2.37	2.16	2.10	2.65	N.A.	1.57	2.26
Surplus (deficit) with respect to average 1*	N.A.	(0.76)	N.A.	0.80	0.59	0.53	1.09	N.A.	0.00	-
Surplus (deficit) with respect to average 2*	N.A.	-	N.A.	0.11	(0.10)	(0.16)	0.39	N.A.	-	0
Number of facilities per Km2	N.A.	5.05	N.A.	0.87	1.48	0.37	0.95	N.A.	0.23	0.18
Surplus (deficit) with respect to average 1*	N.A.	4.81	N.A.	0.64	1.25	0.13	0.72	N.A.	0.00	-
Surplus (deficit) with respect to average 2*	N.A.	-	N.A.	0.46	1.07	(0.04)	0.54	N.A.	-	0
Number of hospital beds										
Ministry of Health	N.A.	604	N.A.	111	155	74	137	N.A.	1,081	477
Private providers	N.A.	183	N.A.	7	-	146	23	N.A.	359	176
Social Security	N.A.	26	N.A.	6	-	46	32	N.A.	110	84
Other	N.A.	25	N.A.	-	-	-	20	N.A.	45	20
Total	6,705	838	7,543	124	155	266	212	15,843	1,595	757
Number of hospital beds per 1,000 inhabitants	12.400	0.967	5.359	0.624	0.743	0.688	1.309	6.704	0.875	0.792
Surplus (deficit) with respect to average 1 (per 1.000 persons)*	11.525	0.092	4.484	(0.251)	(0.132)	(0.187)	0.434	5.829	0	-
Surplus (deficit) with respect to average 2 (per 1.000 persons)*	-	-	4.567	(0.168)	(0.049)	(0.104)	0.517	5.912	-	0
Surplus (deficit) with respect to average 1 (total beds)*	-	79	-	(50)	(27)	(72)	70			
Surplus (deficit) with respect to average 2 (total beds)*	-	-	-	(33)	(10)	(40)	84			

Estimate for Asuncion.
* "Average 1" includes Central, Cordillera, Paraguarí, Caaguazú and Guairá.
** "Average 2" includes only Cordillera, Paraguari, Caaguazú and Guairá.
N.A. Not available.

Annex A. Universe and Sample

Table A.1 Household Survey Questionnaire Contents

Section	Content
Household expenditure	Household expenditures on consumption and investment goods in the past 7, 30, and 180 days.
Characterization of household members and health problem perception	Name, age, sex activity, education and each members' relationship with the head of the household. Health problem perception in a two-week recall period for the population over 6 years of age and in a four-week recall period for children under 5. Pregnancies for women in fertile age. Hospitalization in the past year.
Curative care for population over 6	Health problem description. Days inactive due to illness or injury. Self-medication. Search for care outside the household. Choice of provider. Care received. Out-of-pocket payment. Travel and waiting times to receive care. Search of preventive care.
Curative care for children under 5	The same as the section above, but with more information on diarrheal and respiratory health problems and the preschool preventive care program.
Preventive care for children under 5	Registry of births. Immunizations.
Hospital services	Hospital used. Period of time hospitalize. Out-of-pocket payments.
Obstetric services	Number and characteristics of pregnancies during the women's lives. Children born alive and dead for pregnancies in the past three years. Prenatal care. Choice of provider. Out-of-pocket payments and travel and waiting times to receive care. Satisfaction with care. Health and care of the baby.

Annex B. Sample Characterization

Table B.1 Sex Distribution, by Quintile

		Quintile					
		1 (lowest)	2	3	4	5 (highest)	Total
Household consumption quintile							
Male	row %	16.76	20.32	20.10	22.20	20.62	100.00
	column %	51.03	51.34	48.06	49.35	48.33	49.53
Female	row %	15.78	18.90	21.32	22.36	21.64	100.00
	column %	48.97	48.66	51.94	50.65	51.67	50.47
Total	row %	16.26	19.61	20.71	22.28	21.13	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00
Per capita consumption quintile							
Male	row %	29.64	21.74	18.90	15.67	14.04	100.00
	column %	51.87	49.24	48.87	47.75	48.28	49.53
Female	row %	27.00	21.99	19.41	16.83	14.76	100.00
	column %	48.13	50.76	51.13	52.25	51.72	50.47
Total	row %	28.31	21.87	19.16	16.26	14.41	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00

Table B.2 Education Level of People over 6, by Quintile

		Quintile					
		1 (lowest)	2	3	4	5 (highest)	Total
Household consumption quintile							
Elementary School	row %	4.34	12.29	21.18	29.57	32.62	100.00
	column %	38.63	69.20	76.01	76.76	64.73	68.60
High School	row %	3.37	5.46	13.48	23.45	54.24	100.00
	column %	4.53	4.65	7.31	9.20	16.27	10.37
University/College	row %	2.44	6.18	10.56	21.55	59.28	100.00
	column %	3.08	4.93	5.38	7.94	16.70	9.73
Other	row %	36.69	22.88	19.11	14.26	7.06	100.00
	column %	53.76	21.22	11.30	6.10	2.31	11.30
Total	row %	7.71	12.19	19.11	26.43	34.57	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00
Per capita consumption quintile							
Elementary School	row %	8.37	20.09	22.96	25.37	23.21	100.00
	column %	49.35	73.80	79.40	75.03	59.72	68.60
High School	row %	4.25	9.30	17.12	23.11	46.22	100.00
	column %	3.78	5.17	8.95	10.33	17.97	10.37
University/College	row %	1.08	11.35	9.56	24.26	53.76	100.00
	column %	0.90	5.92	4.69	10.18	19.63	9.73
Other	row %	47.33	24.97	12.21	9.17	6.32	100.00
	column %	45.96	15.11	6.96	4.47	2.68	11.30
Total	row %	11.64	18.67	19.83	23.20	26.66	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00

Table B.3 People Distribution, by Age Range and Quintile

		Quintile					
		1 (lowest)	2	3	4	5 (highest)	Total
Household consumption quintile							
0-5	row %	18.70	23.25	22.31	20.07	15.68	100.00
	column %	17.96	18.52	16.81	14.07	11.58	15.62
6-14	row %	16.38	20.08	21.61	22.31	19.62	100.00
	column %	23.65	24.06	24.48	23.52	21.80	23.48
15-64	row %	14.10	18.41	20.48	23.41	23.60	100.00
	column %	47.73	51.71	54.40	57.86	61.47	55.05
65 and more	row %	29.66	19.14	15.27	17.34	18.59	100.00
	column %	10.66	5.71	4.31	4.55	5.14	5.84
Total	row %	16.26	19.60	20.72	22.28	21.13	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00
Per capita consumption quintile							
0-5	row %	37.72	22.72	17.03	13.52	9.02	100.00
	column %	20.81	16.23	13.88	12.98	9.77	15.62
6-14	row %	37.17	22.66	17.85	12.87	9.46	100.00
	column %	30.84	24.33	21.88	18.59	15.41	23.48
15-64	row %	22.86	21.40	19.65	18.46	17.63	100.00
	column %	44.47	53.88	56.46	62.53	67.33	55.05
65 and more	row %	18.80	20.80	25.51	16.39	18.49	100.00
	column %	3.88	5.56	7.78	5.89	7.50	5.84
Total	row %	28.30	21.86	19.16	16.26	14.42	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00

Table B.4 Average Number of Household Members, by Area and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Household consumption quintile						
Urban	4.78	4.89	5.44	6.03	5.83	5.59
Rural	5.80	6.50	7.12	7.78	7.41	6.69
Total	5.50	5.85	6.13	6.51	6.07	6.04
Per capita consumption quintile						
Urban	7.64	6.21	5.56	4.95	4.49	5.59
Rural	8.10	5.95	5.21	3.97	3.80	6.69
Total	7.97	6.09	5.45	4.78	4.40	6.04

Table B.5 Average Number of Household Members, by Area and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Household consumption quintile						
Urban	3.32	4.02	4.66	5.10	5.07	4.63
Rural	4.32	5.43	5.78	6.45	5.77	5.26
Total	3.96	4.76	5.06	5.41	5.17	4.87
Per capita consumption quintile						
Urban	6.64	5.54	4.87	4.20	3.63	4.63
Rural	6.99	5.10	4.25	3.17	2.87	5.26
Total	6.89	5.33	4.66	3.97	3.51	4.87
Urban per capita consumption quintile						
Urban	6.13	5.14	4.43	3.85	3.62	4.63
Rural per capita consumption quintile						
Rural	7.83	6.00	5.06	4.36	3.07	5.26

Table B.6 Population Distribution, by Area and Quintile

		Quintile					
		1 (lowest)	2	3	4	5 (highest)	Total
Household consumption quintile							
Urban	row %	8.17	13.27	20.73	27.54	30.30	100.00
	column %	29.64	39.95	59.06	72.96	84.64	59.03
Rural	row %	27.93	28.74	20.71	14.70	7.92	100.00
	column %	70.36	60.05	40.94	27.04	15.36	40.97
Total	row %	16.26	19.60	20.72	22.28	21.13	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00
Per capita consumption quintile							
Urban	row %	13.13	20.17	22.60	22.62	21.48	100.00
	column %	27.38	54.47	69.63	82.15	87.94	59.03
Rural	row %	50.17	24.30	14.20	7.08	4.24	100.00
	column %	72.62	45.53	30.37	17.85	12.06	40.97
Total	row %	28.30	21.86	19.16	16.26	14.42	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00

Annex C. Household and Per Capita Consumption

Table C.1 Average Annual Household Consumption (in Thousands of Gs.), by Area and Quintile

		Quintile					
		1 (lowest)	2	3	4	5 (highest)	Total
Household consumption quintile							
Urban	Gs.	4,518.22	7,594.66	10,398.44	14,607.24	38,340.88	18,085.60
	US $	2,305.22	3,874.83	5,305.32	7,452.67	19,561.68	9,227.35
Rural	Gs.	4,458.27	7,375.08	10,151.77	14,092.56	78,973.64	12,907.41
	US $	2,274.63	3,762.80	5,179.47	7,190.08	40,292.67	6,585.41
Total	Gs.	4,479.61	7,478.80	10,310.71	14,491.19	43,935.47	16,126.91
	US $	2,285.51	3,815.71	5,260.57	7,393.46	22,416.06	8,228.01
Per capita consumption quintile							
Urban	Gs.	6,716.51	9,188.30	11,705.51	14,863.06	35,454.94	18,132.06
	US $	3,426.79	4,687.91	5,972.20	7,583.20	18,089.26	9,251.05
Rural	Gs.	6,209.88	8,266.07	10,021.86	10,946.45	70,159.66	12,934.55
	US $	3,168.31	4,217.38	5,113.20	5,584.92	35,795.75	6,599.26
Total	Gs.	6,353.74	8,749.63	11,144.99	13,987.37	40,582.94	16,160.71
	US $	3,241.71	4,464.09	5,686.22	7,136.41	20,705.58	8,245.26
Urban per capita quintile							
Urban	Gs.	7,881.89	10,964.83	13,378.84	16,323.87	42,162.93	18,132.06
	US $	4,021.37	5,594.30	6,825.94	8,328.50	21,511.70	9,251.05
Rural per capita quintile							
Rural	Gs.	6,184.65	8,153.13	9,427.15	12,112.71	40,687.12	12,249.31
	US $	3,155.43	4,159.76	4,809.77	6,179.95	20,758.73	6,249.65

Table C.2 Average Household Consumption Distribution, by Quintile

		Quintile					
		1 (lowest)	2	3	4	5 (highest)	Total
Household consumption quintile							
Urban	row %	2.86	6.39	11.89	20.15	58.70	100.00
	column %	35.90	47.97	64.98	78.07	75.25	69.73
Rural	row %	11.77	15.97	14.75	13.04	44.47	100.00
	column %	64.10	52.03	35.02	21.93	24.75	30.27
Total	row %	5.56	9.29	12.76	18.00	4.39	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00
Per capita consumption quintile							
Urban	row %	3.39	8.56	13.90	20.47	53.68	100.00
	column %	30.02	55.06	70.06	82.50	74.46	69.64
Rural	row %	18.14	16.02	13.62	9.96	42.25	100.00
	column %	69.98	44.94	29.94	17.50	25.54	30.36
Total	row %	7.87	10.82	13.81	17.28	50.21	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00
Urban per capita consumption quintile							
Urban	row %	8.72	12.08	14.79	17.96	46.45	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00
Rural per capita consumption quintile							
Rural	row %	15.04	15.16	14.84	16.34	38.62	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00

Table C.3 Average Annual per Capita Consumption (in Thousands of Gs.), by Area and Quintile

		Quintile					
		1 (lowest)	2	3	4	5 (highest)	Total
Household consumption quintile							
Urban	Gs.	1,959.47	2,389.47	2,739.10	3,562.05	9,139.74	4,574.08
	US $	999.73	1,219.12	1,397.50	1,817.37	4,663.13	2,333.71
Rural	Gs.	1,403.41	1,714.91	2,276.54	2,758.92	21,753.16	3,288.64
	US $	716.03	874.95	1,161.50	1,407.61	11,098.55	1,677.88
Total	Gs.	1,600.44	2,033.91	2,573.27	3,379.88	10,875.61	4,086.53
	US $	816.55	1,037.71	1,312.89	1,724.43	5,548.78	2,084.96
Per capita consumption quintile							
Urban	Gs.	1,035.31	1,670.99	2,425.44	3,561.11	10,146.73	4,574.08
	US $	528.22	852.55	1,237.47	1,816.89	5,176.91	2,333.71
Rural	Gs.	927.20	1,628.14	2,369.55	3,486.67	21,863.66	3,288.64
	US $	473.06	830.68	1,208.95	1,778.91	11,154.93	1,677.88
Total	Gs.	957.90	1,650.61	2,406.83	3,544.46	11,878.04	4,086.53
	US $	488.73	842.15	1,227.98	1,808.40	6,060.22	2,084.96
Urban per capita quintile							
Urban	Gs.	1,324.31	2,138.30	3,020.47	4,261.62	12,142.82	4,574.08
	US $	675.67	1,090.97	1,541.05	2,174.30	6,195.32	2,333.71
Rural per capita quintile							
Rural	Gs.	719.32	1,184.15	1,618.21	2,295.65	10,647.42	3,288.64
	US $	367.00	604.16	825.62	1,171.25	5,432.36	1,677.88

Table C.4 Average per Capita Consumption Distribution, by Quintiles

		Quintile					
		1 (lowest)	2	3	4	5 (highest)	Total
Household consumption quintile							
Urban	row %	4.89	7.98	12.35	19.47	55.31	100.00
	column %	43.38	55.56	68.28	81.48	72.47	69.48
Rural	row %	14.52	14.53	13.06	10.07	47.81	100.00
	column %	56.62	44.44	31.72	18.52	27.53	30.52
Total	row %	7.83	9.98	12.57	16.60	53.02	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00
Per capita consumption quintile							
Urban	row %	2.07	6.17	11.42	19.44	60.90	100.00
	column %	30.69	53.08	67.22	78.01	72.80	69.48
Rural	row %	10.65	12.41	12.67	12.48	51.79	100.00
	column %	69.31	46.92	32.78	21.99	27.20	30.52
Total	row %	4.69	8.08	11.80	17.32	58.12	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00
Urban per capita consumption quintile							
Urban	row %	5.81	9.34	13.24	18.58	53.03	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00
Rural per capita consumption quintile							
Rural	row %	4.38	7.20	9.87	13.94	64.61	100.00
	column %	100.00	100.00	100.00	100.00	100.00	100.00

Annex D. Illness and Injury Perception

Table D.1 Health Problem Perception in the Past Two Weeks, by Area, Age Range, and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban						
0-5	19.05	18.91	22.85	18.69	23.42	20.47
6-14	7.40	10.50	8.97	5.21	4.01	7.42
15-64	12.98	13.48	12.41	11.39	9.33	11.68
65 and more	26.28	32.40	18.26	35.33	21.27	25.54
Subtotal	13.37	14.58	13.60	12.39	10.70	12.87
Rural						
0-5	18.85	19.96	19.69	22.21	17.85	19.31
6-14	9.55	10.80	10.53	13.24	7.17	10.06
15-64	15.39	11.72	16.23	19.49	15.24	14.97
65 and more	27.27	34.31	30.90	38.63	17.88	30.80
Subtotal	14.63	14.29	16.61	20.70	14.96	15.27
Total						
0-5	18.90	19.40	21.95	19.24	22.74	19.93
6-14	9.01	10.64	9.48	6.32	4.25	8.67
15-64	14.68	12.72	13.54	12.88	10.08	12.89
65 and more	26.83	33.40	22.51	36.27	20.72	27.51
Total	14.28	14.45	14.52	13.87	11.21	13.86

Table D.2 Average Annual Number of Episodes, by Area, Age Range, and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban						
0-5	4.57	4.54	5.48	4.49	5.62	4.91
6-14	1.78	2.52	2.15	1.25	0.96	1.78
15-64	3.12	3.24	2.98	2.73	2.24	2.80
65 and more	6.31	7.78	4.38	8.48	5.10	6.13
Subtotal	3.21	3.50	3.26	2.97	2.57	3.09
Rural						
0-5	4.52	4.79	4.73	5.33	4.28	4.64
6-14	2.29	2.59	2.53	3.18	1.72	2.41
15-64	3.69	2.81	3.90	4.68	3.66	3.59
65 and more	6.54	8.23	7.42	9.27	4.29	7.39
Subtotal	3.51	3.43	3.99	4.97	3.59	3.67
Total						
0-5	4.54	4.66	5.27	4.62	5.46	4.78
6-14	2.16	2.55	2.28	1.52	1.02	2.08
15-64	3.52	3.05	3.25	3.09	2.42	3.09
65 and more	6.44	8.02	5.40	8.70	4.97	6.60
Subtotal	3.43	3.47	3.48	3.33	2.69	3.33

Annex E. Days Inactive

Table E.1 Percentage of People Who Perceived a Health Problem in the Past Two Weeks and Who Spent Days Inactive Due to Illness or Injury, by Area, Age Range, and Quintile (Only for People Over 6)

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban						
6-14	42.11	53.12	53.45	24.26	47.07	46.20
15-64	54.33	58.13	51.10	59.39	47.67	54.29
65 and more	41.95	57.79	59.09	38.99	50.01	49.34
Subtotal	49.74	57.10	52.59	52.03	48.03	52.30
Rural						
6-14	61.07	73.85	78.32	55.58	0.00	65.52
15-64	68.83	65.96	64.21	56.21	60.66	65.48
65 and more	75.00	61.80	68.05	70.53	100.00	69.54
Subtotal	67.07	67.08	67.47	59.08	62.82	66.06
Total						
6-14	57.10	63.44	62.77	33.38	39.96	56.86
15-64	65.01	61.25	55.69	58.52	50.00	59.02
65 and more	59.77	59.92	63.23	48.55	57.34	57.73
Subtotal	62.42	61.51	58.12	54.01	50.58	58.43

Table E.2 Average Number of Days Inactive Due to Illness, by Area, Age Range, and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban						
6-14	3.34	6.44	4.91	4.63	1.75	4.90
15-64	6.12	8.54	10.81	4.88	4.09	7.04
65 and more	4.08	13.72	4.42	16.41	8.52	9.90
Subtotal	5.35	8.88	8.79	6.46	4.74	7.19
Rural						
6-14	3.59	2.73	3.34	3.61	0.00	3.31
15-64	6.41	4.66	6.14	8.29	4.72	6.12
65 and more	16.12	6.82	8.43	8.07	9.20	9.86
Subtotal	6.46	4.53	6.01	7.76	5.74	6.03
Total						
6-14	3.55	4.29	4.18	4.13	1.75	3.89
15-64	6.34	6.87	8.93	5.77	4.23	6.61
65 and more	12.22	9.93	6.41	12.74	8.69	9.88
Subtotal	6.22	6.78	7.59	6.86	4.95	6.61

Table E.3 Average Annual Number of Days Inactive Due to Illness, by Area, Age Range, and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban						
6-14	2.50	8.62	5.65	1.40	0.79	4.03
15-64	10.35	16.05	16.45	7.92	4.37	10.72
65 and more	10.79	61.66	11.45	54.24	21.75	29.96
Subtotal	8.54	17.74	15.09	9.99	5.84	11.61
Rural						
6-14	5.02	5.23	6.62	6.37	0.00	5.24
15-64	16.29	8.64	15.37	21.78	10.47	14.39
65 and more	79.11	34.70	42.54	52.78	39.48	50.67
Subtotal	15.21	10.43	16.17	22.76	12.95	14.61
Total						
6-14	4.38	6.95	5.97	2.09	0.71	4.61
15-64	14.53	12.85	16.15	10.44	5.11	12.06
65 and more	47.05	47.68	21.91	53.83	24.79	37.66
Subtotal	13.31	14.47	15.37	12.33	6.74	12.84

Annex F. Health Care-Seeking Behavior

Table F.1 Percentage Seeking Care, by Area and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Per capita consumption quintile						
Urban	50.98	54.14	65.52	69.76	66.72	62.11
Rural	34.90	44.85	49.80	65.62	64.95	43.74
Total	39.14	49.94	60.08	68.67	66.44	53.89
Household consumption quintile						
Urban	56.40	59.57	62.89	61.71	66.98	62.11
Rural	38.89	41.49	48.06	44.79	64.78	43.74
Total	44.62	48.96	56.36	57.25	66.58	53.89

Annex G. Choice of Provider

Table G.1 Choice of Provider of Those Seeking Care, by Area and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban						
Public	24.59	15.95	16.73	13.25	13.97	16.08
IPS	19.16	11.84	10.73	14.58	13.48	13.36
Private	40.00	49.04	59.27	55.66	64.22	55.18
Others	16.25	23.18	13.27	16.50	8.33	15.38
Subtotal	100.00	100.00	100.00	100.00	100.00	100.00
Rural						
Public	21.24	20.48	22.71	25.41	7.72	21.12
IPS	2.46	4.00	11.65	9.54	11.51	6.06
Private	54.15	56.99	52.62	55.54	78.84	56.24
Others	22.15	18.53	13.02	9.51	1.93	16.59
Subtotal	100.00	100.00	100.00	100.00	100.00	100.00
Total						
Public	22.34	17.86	18.51	16.50	12.96	17.98
IPS	7.94	8.53	11.00	13.24	13.16	10.60
Private	49.51	52.39	57.30	55.63	66.57	55.58
Others	20.21	21.22	13.20	14.64	7.30	15.83
Subtotal	100.00	100.00	100.00	100.00	100.00	100.00

Table G.2 Choice of Provider by Those Seeking Care, by Area, Age Range, and Quintile

	Age range				
	0-5	6-14	15-64	65 and more	Total
Urban					
Public	20.21	17.40	12.62	19.85	16.08
IPS	7.56	18.25	15.06	14.71	13.36
Private	53.95	48.70	55.75	61.03	55.18
Others	18.28	15.65	16.57	4.41	15.38
Subtotal	100.00	100.00	100.00	100.00	100.00
Rural					
Public	24.59	25.01	20.86	13.62	21.12
IPS	5.23	5.33	7.10	4.55	6.06
Private	36.61	53.56	60.66	72.73	56.24
Others	33.57	16.10	11.38	9.10	16.59
Subtotal	100.00	100.00	100.00	100.00	100.00
Total					
Public	21.69	20.62	15.71	17.22	17.98
IPS	6.77	12.78	12.08	10.41	10.60
Private	48.12	50.76	57.59	65.98	55.58
Others	23.42	15.84	14.62	6.39	15.83
Subtotal	100.00	100.00	100.00	100.00	100.00

Table G.3 Percentage Who Were Seen by a Doctor from Those Who Sought Care, by Area and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban	81.60	81.40	76.87	89.38	97.24	85.21
Rural	49.03	65.63	74.32	79.34	90.35	63.84
Total	59.61	75.05	76.14	86.85	96.19	77.30

Annex H. Utilization of Hospital Services

Table H.1 Percentage Seeking Care in a Health Facility, by Area and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban	71.25	70.91	83.17	81.27	89.37	79.43
Rural	82.04	77.36	82.96	89.18	93.86	83.74
Total	76.34	77.63	87.30	82.32	90.76	82.08

Annex I. Prenatal Care and Immunizations

Table I.1 Average Number of Immunizations, by Area, Age Range, and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban						
0-3 months	1.59	1.46	1.37	2.12	3.12	1.75
4-6 months	1.75	2.28	3.00	3.69	2.80	2.73
7-11 months	3.48	3.10	3.44	3.50	3.14	3.33
1 year	3.09	3.72	3.61	3.93	3.94	3.69
2 years	3.41	3.70	3.79	3.92	3.71	3.69
3 years	3.60	3.81	3.82	3.90	4.00	3.82
4 years	3.68	3.92	3.88	4.00	3.81	3.88
5 years	3.61	3.96	3.93	3.97	4.00	3.91
Subtotal	3.28	3.59	3.62	3.82	3.76	3.62
Rural						
0-3 months	0.58	1.31	0.44	2.24	N.A.	0.84
4-6 months	2.11	2.00	3.67	N.A.	2.00	2.19
7-11 months	2.30	1.94	3.25	2.66	4.00	2.39
1 year	2.92	3.15	3.40	3.73	4.00	3.13
2 years	3.25	3.30	3.60	4.00	3.40	3.35
3 years	3.50	3.71	3.89	3.83	4.00	3.61
4 years	3.61	3.69	3.78	3.67	4.00	3.65
5 years	3.50	3.76	4.00	3.83	3.25	3.62
Subtotal	3.10	3.25	3.45	3.63	3.71	3.21
Total						
0-3 months	0.87	1.39	1.04	2.15	3.12	1.31
4-6 months	2.03	2.15	3.10	3.69	2.73	2.50
7-11 months	2.67	2.58	3.39	3.31	3.25	2.90
1 year	2.96	3.49	3.53	3.89	3.95	3.42
2 years	3.30	3.50	3.73	3.94	3.67	3.52
3 years	3.52	3.76	3.84	3.90	4.00	3.72
4 years	3.62	3.82	3.86	3.95	3.83	3.77
5 years	3.53	3.86	3.94	3.95	3.93	3.79
Subtotal	3.15	3.43	3.57	3.79	3.76	3.43

Table I. 2 Prenatal Care, by Area and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban						
Received prenatal care	91.67	100.00	100.00	95.08	100.00	97.30
Did not receive prenatal care	8.33	0.00	0.00	4.92	0.00	2.70
Subtotal	100.00	100.00	100.00	100.00	100.00	100.00
Rural						
Received prenatal care	89.07	96.22	100.00	100.00	100.00	92.38
Did not receive prenatal care	10.93	3.78	0.00	0.00	0.00	7.62
Subtotal	100.00	100.00	100.00	100.00	100.00	100.00
Total						
Received prenatal care	89.74	98.14	100.00	95.81	100.00	94.83
Did not receive prenatal care	10.26	1.86	0.00	4.19	0.00	5.17
Subtotal	100.00	100.00	100.00	100.00	100.00	100.00

Annex J. Deliveries

Table J.1 Choice of Provider for Deliveries, by Area and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban						
Public health facility	41.67	32.54	26.39	27.88	13.33	29.74
Private Hospital	5.55	24.09	23.61	19.68	55.55	23.42
Clinic Hospital	4.16	3.61	12.50	9.83	0.00	6.30
IPS Hospital	2.78	6.03	4.17	24.58	13.33	9.31
Red Cross	12.49	10.84	4.17	0.00	6.67	7.20
Military/Police Hospital	0.00	0.00	13.89	9.83	0.00	4.80
Clinic and/or Private Doctor	5.56	3.61	5.56	0.00	8.89	4.51
Home with professional obstetrician	9.72	3.61	8.33	1.64	2.23	5.40
Home with midwife	15.28	8.43	0.00	0.00	0.00	5.41
Home with family	0.00	0.00	0.00	0.00	0.00	0.00
Alone	0.00	0.00	0.00	0.00	0.00	0.00
Others	2.78	7.23	1.39	6.56	0.00	3.91
Subtotal	100.00	100.00	100.00	100.00	100.00	100.00
Rural						
Public health facility	35.04	49.04	31.81	28.71	25.11	37.67
Private Hospital	8.02	11.35	18.22	42.82	25.11	11.21
IPS Hospital	1.46	0.00	18.07	0.00	49.79	3.57
Red Cross	0.73	3.75	0.00	0.00	0.00	1.34
Clinic and/or Private Doctor	4.37	5.67	13.67	0.00	0.00	5.38
Home with professional obstetrician	5.11	5.64	0.00	0.00	0.00	4.48
Home with midwife	18.99	11.35	9.11	0.00	0.00	15.27
Home with family	3.65	1.89	4.56	0.00	0.00	3.14
Alone	0.73	0.00	4.56	0.00	0.00	0.90
Others	21.89	11.31	0.00	28.47	0.00	17.03
Subtotal	100.00	100.00	100.00	100.00	100.00	100.00
Total						
Public health facility	36.75	40.64	28.10	28.00	14.72	33.73
Private Hospital	7.39	17.84	21.91	23.08	51.96	17.28
Clinic Hospital	1.07	1.84	8.55	8.38	0.00	3.13
IPS Hospital	1.80	3.07	8.55	20.96	17.64	6.42
Red Cross	3.77	7.36	2.85	0.00	5.88	4.26
Military/Police Hospital	0.00	0.00	9.51	8.38	0.00	2.39
Clinic and/or Private Doctor	4.68	4.62	8.12	0.00	7.84	4.95
Home with professional obstetrician	6.30	4.61	5.70	1.40	1.96	4.94
Home with midwife	18.03	9.86	2.88	0.00	0.00	10.37
Home with family	2.71	0.93	1.44	0.00	0.00	1.58
Alone	0.54	0.00	1.44	0.00	0.00	0.45
Others	16.96	9.24	0.95	9.78	0.00	10.51
Subtotal	100.00	100.00	100.00	100.00	100.00	100.00

Annex K. Consumption of Medicines

Table K.1 Percentage of Those Who Bought Medicines in the Last Two Weeks, by Area and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban						
Bought medicines	56.34	62.68	62.44	71.78	72.50	65.45
Did not buy medicines	43.66	37.32	37.56	28.22	27.50	34.55
Subtotal	100.00	100.00	100.00	100.00	100.00	100.00
Rural						
Bought medicines	65.95	72.99	70.99	51.10	54.84	66.40
Did not buy medicines	34.05	27.01	29.01	48.90	45.16	33.60
Subtotal	100.00	100.00	100.00	100.00	100.00	100.00
Total						
Bought medicines	63.41	67.37	65.40	66.00	69.65	65.88
Did not buy medicines	36.59	32.63	34.60	34.00	30.35	34.12
Subtotal	100.00	100.00	100.00	100.00	100.00	100.00

Table K.2 Percentage Seeking Care, Receiving a Prescription, and Receiving Medicines at the Health Facility, by Area and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban						
Sought care, received prescription and received medicine	44.18	30.42	39.52	28.37	27.36	33.20
Sought care and received prescription	86.82	92.12	91.14	88.66	91.50	90.31
Sought care	100.00	100.00	100.00	100.00	100.00	100.00
Rural						
Sought care, received prescription and received medicine	53.37	45.63	39.57	37.31	30.78	45.51
Sought care and received prescription	92.97	94.12	97.40	100.00	100.00	95.44
Sought care	100.00	100.00	100.00	100.00	100.00	100.00
Total						
Sought care, received prescription and received medicine	50.31	36.54	39.53	30.62	27.88	37.70
Sought care and received prescription	90.92	92.93	92.92	91.51	92.79	92.18
Sought care	100.00	100.00	100.00	100.00	100.00	100.00

Table K.3 Percentage of Self-Medication, by Area and Quintile

	Quintile					
	1 (lowest)	2	3	4	5 (highest)	Total
Urban	36.73	39.93	31.37	30.69	28.43	33.47
Rural	42.66	45.00	42.38	39.65	25.54	42.27
Total	41.15	42.22	35.13	32.80	27.98	37.48

Annex L. Health Spending

Table L.1 Average Health Spending in the Last Two Weeks, by Area and Quintile

		Quintile					
		1 (lowest)	2	3	4	5 (highest)	Total
Urban	Gs.	18,995.70	29,638.76	32,214.82	45,491.55	47,390.06	35,549.21
	US $	9.69	15.12	16.44	23.21	24.18	18.14
Rural	Gs.	14,354.20	24,068.22	32,260.60	45,414.25	52,171.89	24,139.73
	US $	7.32	12.28	16.46	23.17	26.62	12.32
Total	Gs.	15,548.53	27,147.72	32,230.95	45,470.57	48,149.76	30,432.14
	US $	7.93	13.85	16.44	23.20	24.57	15.53

Table L.2 Average Annual per Capita Health Spending, by Area and Quintile

		Quintile					
		1 (lowest)	2	3	4	5 (highest)	Total
Urban	Gs.	60,971.12	103,733.32	105,160.15	135,267.62	121,692.53	109,822.41
	US $	31.11	52.93	53.65	69.01	62.09	56.03
Rural	Gs.	50,393.97	82,547.20	128,636.70	225,566.19	187,349.23	88,479.04
	US $	25.71	42.12	65.63	115.08	95.59	45.14
Total	Gs.	53,305.09	94,147.13	112,290.98	151,368.83	129,582.62	101,194.00
	US $	27.20	48.03	57.29	77.23	66.11	51.63

Note: The average expenditure on health care for the past two weeks for those who perceived a health problem was multiplied by the number of annual episodes.

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